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Special Report: GS and IMAX Theaters in 2018

The slow decline in the number of non-multiplex giant-screen theaters continued in 2018, with the total dropping by two, from 213 at the start of 2018 to 211 as of Jan. 1, 2019. This small reduction continues a downward trend that started after the world total of non-multiplex GS theaters peaked at 276 in 2005. Three non-multiplex theaters closed last year, and one new commercial theater opened.

As of the first of this year there were 183 institutional GS theaters, 28 commercial standalone venues (including five in theme parks), and 1,393 IMAX multiplex screens. This makes a total of 1,604 giant-screen and IMAX theaters worldwide, an increase of 11% over the previous year's total of 1,451.

Six institutional theaters converted from film to digital projection in 2018, and two multiplexes removed their IMAX film projectors, dropping the worldwide total of GS theaters capable of screening 70mm film to 120, of which 60 have both film and digital, including 36 in multiplexes.

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Of the 211 non-multiplex theaters, 129 (61%) are digital-only, 23 (11%) have both film and digital, and 59 (28%) are film-only. There are 98 dome theaters, making up 46% of all non-multiplex screens, plus two that are convertible between flat and dome screens.

The total of multiplex IMAX theaters increased by 155 in 2018, with 160 new installations and five closures.

The count of true giant screens, as defined by the **Giant Screen Cinema Association**, stood at 251 as of Jan. 1, 2019, and includes 79 multiplex theaters. (*See page 15 for more about what we count.*)

Openings, closings, conversions

Openings. No new institutional GS theaters opened in 2018, nor did any close. Apart from 160 new IMAX theaters in multiplexes, the only non-multiplex GS theater to open in 2018 was the IMAX theater on board the cruise ship *Carnival Horizon*, which entered service in April 2018, joining its sister ship, the *Carnival Vista*, which set sail with an IMAX theater in 2016. Both theaters seat 187, and have screens about 24x43 feet (7x13 meters).

Unlike most multiplex theaters, the cruise ships have booked at least two original GS films to date, **MacGillivray Freeman Films' National Parks Adventure** and **Superpower Dogs** from **Imax Corporation** and **Cosmic Picture**. For this reason, we are including both theaters in our counts. (In previous reports we had excluded the *Vista* as not being "public.")

Closings. Three non-multiplex GS theaters closed in 2018. Paris' **La Géode**, the IMAX film theater in an iconic mirrored sphere, closed in November for renovation to an as-yet undisclosed attraction

(*see THEATERS on page 6*)

E&S Announces LED Dome

Evans & Sutherland, a supplier of fulldome and giant-screen projection systems, has announced a new LED dome system that "vastly outperforms projector-based solutions in contrast, brightness, reliability, and lifespan," according to a press release. The system, branded as "DomeX," will be suitable for displaying both giant-screen films and fulldome planetarium shows in domes up to 100 feet (30 meters) in diameter. A 66-foot (20-meter) demo system has been installed in China, and E&S expects to have a similar system in its Utah headquarters by the end of the year.

E&S subsidiary **Spitz**, which has specialized in building dome screens for decades, will provide the support structures needed to mount the LED panels, which cannot be retrofitted onto the frames of existing planetarium or GS domes.

Filmmaker and systems integrator **Jean Francois Delorme** is quoted in an E&S press release as saying, "When I saw DomeX in person the image was so close to perfection, with very high resolution and contrast. It was so real. I was looking at the next generation of giant dome technology."

According to a report in *InPark* magazine, an Austrian company, **Kraftwerk Living Technologies**, is also developing an LED dome system, and other sources tell *LF Examiner* that other players may also soon enter the field, some of which may be based on the same Chinese technology used in DomeX.

(*see DOMEX on page 2*)

Premiering in May and June
Apollo 11: First Steps Edition
Hidden Pacific

See page 16.

Founded 1997 as MaxImage!

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Evans & Sutherland Announces LED Dome

(from **DOME**X on page 1)

These announcements have the potential to revolutionize dome theaters of all types by offering amazingly bright, vivid, and immersive images without many of the drawbacks inherent in projecting images on a dome surface: low brightness and contrast, and projector sightlines that can make projector lenses visible to the audience and allow viewers to cast shadows on the dome. The tech is also adaptable to shapes other than the traditional level or tilted hemisphere, including three-quarter spheres, full spheres, and other less conventional, perhaps even irregular, shapes.

The LED difference

As *LFX* has reported previously (see *April-May 2017*), flat-panel LED displays have long been used for outdoor signage and other high-profile applications, but they have only been considered for use in cinemas in the past two years. To date, a few dozen multiplex theaters have been equipped with LED screens.

These systems use panels consisting of large arrays of LEDs, each of which forms one pixel. There is therefore a direct relationship between the overall display size, resolution, and pixel pitch (the distance between pixels). Expanding a given resolution to a larger display requires a larger pitch. Conversely, using the same pixel pitch on a larger display results in a panel with higher resolution.

LEDs provide brightness levels at least one order of magnitude higher than the brightest laser projectors. They can meet advanced standards for color gamuts (e.g., Rec. 2020), and are even capable of 3D with active glasses. They offer contrast that is characterized as “near infinite” because they emit no light at all when displaying black, whereas even the best projection systems emit a small amount of light at full black. LEDs thus provide an enormous range between the brightest whites and the darkest

blacks.

In domes LEDs have an even greater advantage, because conventional projection onto a white dome surface inevitably creates cross reflectance that dramatically reduces image contrast far below the projectors’ nominal spec. Because LED panels have matte black surfaces, they will virtually eliminate cross reflectance.

LED domes will also eliminate many of the operational problems of multi-projector dome systems, such as alignment and blending, lamp changes, warm-up times, and projector noises inside the theater. LEDs are very low maintenance and offer lifespans comparable to laser systems, on the order of tens of thousands of hours, compared to 3,000 hours or less for lamp-based projectors.

DomeX

E&S CEO **Kirk Johnson** tells *LFX* that DomeX will be offered for both ESX giant-screen cinema and Digistar fulldome installations in resolutions of 8K or higher across 180 degrees. It will provide light levels of up to 50 foot-Lamberts, more than 2.5 times brighter than flat-screen IMAX laser projectors (22 fL) and ten times brighter than today’s brightest laser-illuminated dome theaters. For example, the E&S Digistar 6 system in the 89-foot (27-meter) Jennifer Chalsty Planetarium at the **Liberty Science Center** in Jersey City, NJ, uses ten Christie



An artist's representation of Evans & Sutherland's DomeX system.

Boxer laser projectors to achieve 4 fL.

DomeX will be capable of frame rates up to 120 fps.

Johnson says that DomeX panels will be available in a number of different pixel pitches, for different size domes, although he declined to specify any. However the math is simple: a 20-meter dome has a half circumference (180 degrees) of 62.8 meters (20x3.14). Divide that by 7,680 pixels (8K) to get a pitch of 8.18 millimeters, slightly less than a third of an inch.

(However, since viewers around the edge of the dome are much closer to the screen than the closest viewers in a flat-screen GS theater, it's not clear whether the pitch would have to be finer to prevent those viewers from seeing individual pixels.)

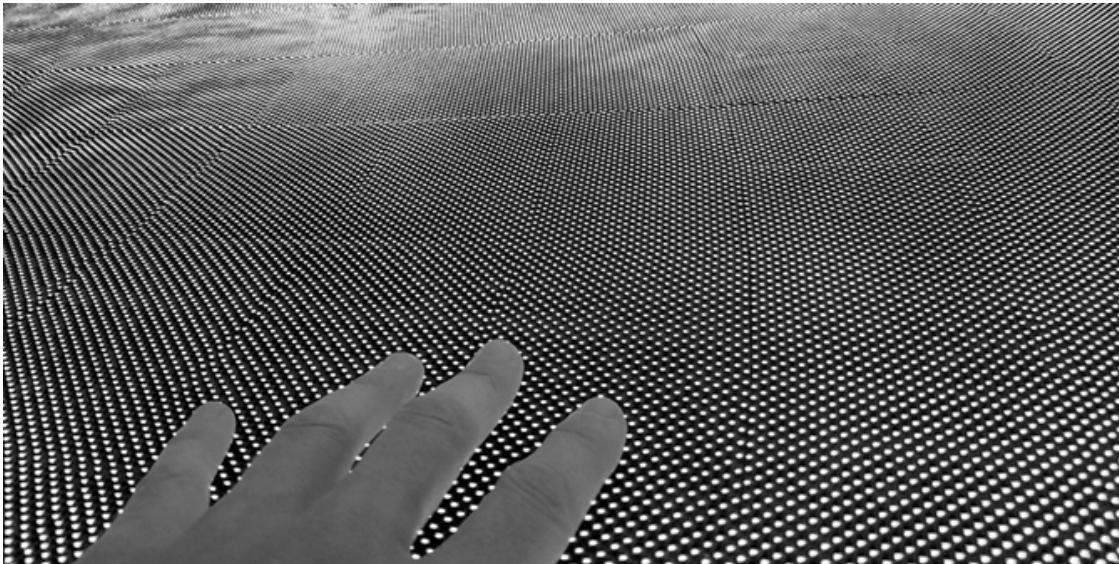
As with flat LED displays, DomeX will consist of numerous flat modules mounted seamlessly to each other, but unlike other existing systems, which can only be curved along one axis, DomeX modules can be arranged in a spherical form, using several different rectangular panel sizes.

One problem with existing flat LED displays is that they don't permit sound to pass through them as conventional perforated projection screens do. This has required the development of new sound systems for LED installations in cinemas, to create the illusion of sound coming directly from screen.

Solid LED panels would be an even greater problem in dome theaters, because the perforations in dome skins allow not only for the passage of sound from rear-mounted speakers, but also of air for ven-

Corrections

Our report on *Superpower Dogs* and the "Dogs! A Science Tale" exhibit at the California Science Center in the April 2019 issue incorrectly stated the amount of U.S. spending on pets in 2017. It is \$69.5 billion, not \$69.5 million.



A closeup of actual DomeX panels.

titation. In most cases, installing a solid dome skin in a theater designed for a perforated dome would require completely reworking the HVAC system. However, according to Johnson, DomeX panels are perforated, avoiding that issue. E&S is also working with acoustical experts to develop a new sound system optimized for DomeX theaters.

E&S says that it is currently accepting orders for DomeX, and that it may announce its first sale soon. Johnson tells *LFX* that he expects to sell "a few a year in the first few years," but expects more sales as prices drop.

Downsides to LEDs

The most obvious problem with LED displays, whether in flat or dome theaters, is cost. The price of putting a 20-meter dome and laser projection system into an existing building (not counting seats, sound system, and other ancillary items) is slightly over \$2 million. E&S's Johnson says that a DomeX installation will cost between two and three times that, a figure corroborated by other sources. However, as with all things electronic, prices are expected to fall over time.

Even at the current price of roughly \$5 million, total cost of ownership of an LED dome over a lifetime as long as 20 years might be comparable to, or even lower than, current projection systems. LED systems have lower maintenance costs and

don't require periodic projector upgrades that would probably be needed at least once or twice over the course of two decades.

Johnson says that despite offering light levels ten times or more higher than existing systems, DomeX will only consume about 10% more electricity and put out about 10% more heat than the ten-projector laser system at the Liberty Science Center. Even so, some upgrades to HVAC systems may be required, adding to the total cost.

Another potential issue for DomeX (and any LED dome system) is DCI compliance. Although the display technology is well within the image quality requirements of DCI, there are no published specs related specifically to dome theaters, which could lead to delays. More importantly, DCI requires that servers use encryption to protect the copyrights of the content owners. In the fulldome world, this has not been much of an issue to date because few fulldome producers and theaters have bothered with digital rights management technologies. However, the fulldome community is moving toward greater protection for its content, and giant-screen theaters are almost universally able to show DCI-compliant content. Most of them would require that capability in any new system. E&S says that it is working on obtaining DCI certification for its DomeX playback system.

THE BIZ

NEWS

Imax Corp. posts \$8.3M Q1 profit

In late April, **Imax Corporation** posted its financial results for the first quarter ending March 31, 2019. The company reported a profit of \$8.3 million (\$0.13 per share) on revenues of \$80.2 million, compared to a profit of \$8.5 million (\$0.13 per share) on revenues of \$85.0 million in the same quarter of 2018. Imax signed deals for 23 theater systems and installed 17 systems in 2019's Q1, compared to 45 signings and 16 installs in 2018's. The company had 571 theaters in backlog as of March 31, 2019, compared to 529 at the end of last year's first quarter. The total count of IMAX theaters as of March 31, 2019, was 1,514, of which 1,420 are in multiplexes, 80 in institutional theaters, and 14 in commercial standalone theaters. This compares to 1,382 on March 31, 2018: 1,286 multiplex, 84 institutional, 14 standalone.

Shares of Imax on the New York Stock Exchange closed at \$24.43 on the day of the report, rose to \$25.40 less than a week later, but had dropped to \$19.84 as this issue went to press in early June.

In interviews following the report, Imax CEO **Rich Gelfond** said that although blockbuster movies are the company's lifeblood, he was looking at "other kinds of blockbuster content" to fill gaps in the movie release schedule. He suggested that esports, professional multiplayer video game competitions that attract audiences of tens of thousands to major arenas around the world, might be an option for IMAX theaters. (Reuters reports that revenues from esports could top \$1.1 billion this year.)

In mid-May, Imax announced that it would screen an **Amazon Studios** production, *The Aeronauts*, starring Eddie Redmayne and Felicity Jones, for one week in October. Gelfond told *Variety* that the company plans to book more content from streaming platforms, as long as it's "IMAX-worthy" and "as long as it respects the [theatrical] windows," meaning that it remains exclusively in theaters for a certain period before being offered online or

broadcast. He said he expects the window for streaming content to work out to between four and eight weeks.

Gelfond also said in May that he expects the company to expand its presence in Saudi Arabia, pointing out that its two existing multiplex theaters in the kingdom are among the top-performing IMAX theaters in the world. "The market potential in Saudi Arabia is enormous," Gelfond said at a presentation in Cannes. "On the one hand, you have the government that has clearly done a number of things that violate the world's norms and moral codes, but on the other hand you have a population where it would be good for their people to modernize," he said.

SK to distribute BBC's *Antarctica*

BBC Studios has selected **SK Films** as theatrical distributor for *Antarctica: Into the Unknown*, set for release to giant-screen theaters in 2021. The film is being directed by **Fredi Devas**, produced by **Johnny Keeling** and **Myles Connolly**, with executive producer **Jonathan Williams**.

New Delhi drops 8/70 for lasers

In April, **Swaminarayan Akshardham**, the Hindu spiritual and cultural campus in New Delhi, India, that commissioned *Mystic India* in 2005, replaced its original Iwerks 8/70 film projector with a two-projector digital system. The new custom-designed system blends two Barco 4K laser projectors into an image that retains the 1.33 aspect ratio of the film. Because of the short throw distance, a new, slightly smaller screen was installed, dropping the width from about 85 feet (26 meters) to 76 feet (23 meters).

The theater regularly shows *Neelkanth Darshan*, a version of *Mystic India* that focuses on the early life and pilgrimage of the young man who would become Swaminarayan, an influential Hindu yogi.

Eather selling 15/65 camera

Robert Eather of **Keo Consultants** in Brookline, MA, is seeking to sell a 15-perf, 65mm camera he developed for GS time-



The Keo time-lapse 15/70 film camera.

lapse photography. Based on a flight research camera originally intended for nuclear tests, the camera was designed to minimize vibration and features a set of reciprocating rollers in place of the usual claw movement, reducing the chance of film breakage or damage. During exposure, each frame is pin registered, and a vacuum pump holds the film flat over the aperture.

The 75-pound (34-kilogram) camera can run at frame rates between 1 and 48 fps, and has a built-in intervalometer that permits time-lapse exposures at rates between 1 frame per day and 2 fps. All electronics are "modern circuit-board, solid-state design and the drive motor is a brushless DC type, with an integral optical encoder."

The full package being offered includes three magazines (two 1,000-foot, one 500-foot), ten Mamiya RB lenses from 37mm fisheye to 500mm, motorized pan and tilt head and dolly drive, filters, batteries, and much more. Eather can be reached at keoconsult@gmail.com.

Baltimore's Jim O'Leary retires

Jim O'Leary has retired from the **Maryland Science Center** after a career of 44 years at the institution in Baltimore. O'Leary started with the center in 1975, just before the 1976 opening of the center's new facility in the Inner Harbor, one

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PERSONNEL

of the first projects in the revitalization of the city's downtown area. He started as a producer for the Davis Planetarium, a 50 foot (15-meter) dome originally outfitted with a Konica-Minolta instrument. In that role he wrote and produced dozens of planetarium shows that were sold (as slides and cassette tapes in the pre-digital era!) to more than 700 planetariums worldwide.

When the center opened its 400-seat IMAX theater in 1987, O'Leary became director of it and the planetarium, and subsequently contributed to the production of several GS films including *The Human Body* (2001), *Dinosaurs Alive* (2007), and *Flight of the Butterflies* (2012). His contributions outside the IMAX theater and planetarium include renovating the rooftop observatory and refurbishing a 1920s telescope with a computer control system; the first museum installation of Science on a Sphere; and grant-related programs that raised about \$9 million for the center from the National Science Foundation, NASA, NOAA, and other organizations.

Estelle Pacalon joins E&S

Evans & Sutherland has named Estelle Pacalon to be its show distribution and sales manager, responsible for overseeing distribution of the company's fulldome shows and giant-screen titles converted to fulldome format. Pacalon, who will be based in Europe, comes to E&S from RSA Cosmos, where she handled sales and marketing for the last seven years. She holds a Master's degree from the Clermont Graduate School of Management in France, and is fluent in French, Italian, Spanish, and English.



Jim O'Leary

Bev Pasterczyk retires from Kodak

Beverly Pasterczyk has retired after 39 years with Eastman Kodak, the last 14 as regional technical director, where she championed the use of motion picture film in many applications, including the giant screen. She was a frequent attendee and presenter at GS industry conferences, served on several committees of the Giant Screen Cinema Association and on the board of the Large Format Cinema Association. She was a member of Science and Technology Council of the Academy of Motion Picture Arts and Sciences and an associate member of the American Society of Cinematographers. One of her most recent presentations was at an ASC Master Class on the use of motion picture film in November 2018.

Pasterczyk tells *LFX*, "I began my career at Kodak as a co-op student whilst studying chemical engineering at [the University of Rochester in New York] and went to work at Kodak upon graduation. That was 39 years ago! I had a great run at Kodak. Met so many incredible people and had the chance to do some fun things." She is now so busy traveling, spending time with her family, and enjoying her retirement that she didn't have time to provide more biographical details for this item. (And we don't blame her!)

Perez moves to NYC's The Shed

Gil Perez has become the chief visitor experience officer at The Shed in New York City, an experimental art facility that "bring[s] together established and emerging artists in fields ranging from hip hop to classical music, painting to digital media, theater to literature, and sculpture to dance," according to its Web site.

Perez comes to The Shed from the Museum of Science and Industry in Chicago, where he was director of film and guest

operations for nearly seven years, overseeing the programming and operation of its 353-seat giant-dome theater, which he converted from IMAX 15/70 film projection to D3D/Christie digital in the spring of 2017. In the fall of that year, the museum co-hosted the annual conference of the Giant Screen Cinema Association. At MSI Perez also managed the museum's film assets, including the GS titles *Antarctica* (1991) and *Solar Max* (2000).



Gil Perez

Before moving to Chicago in 2012, Perez was regional director of operations of commercial theaters for Destination Cinema, Inc., overseeing six of the company's GS theaters in San Antonio, Niagara Falls, the Grand Canyon, and the Hearst Castle in San Simeon, CA.

From 1993 to 2006, Perez was director of ticketing and attractions at the MGM Mirage hotel and casino in Las Vegas, where he was responsible for all aspects of the customer experience for the showrooms and attractions. Starting in 1996, this included a 300-seat IMAX theater. At Luxor Perez was the official spokesperson for media interviews on the casino's attractions, and in 2005 he was selected to enter the Luxor's prestigious Leadership Institute, graduating from it in 2006.

Perez holds a Bachelor's degree in Psychology and Economics from Mercer University in Macon, GA.

He tells *LFX* that "I'm truly excited about my new role at The Shed, but will miss the many friends and colleagues that I've had the pleasure of meeting through the GSCA."

Vicki Ahrens memorial in Tampa

Just as this issue went to press, we learned of the death of Vicki Ahrens, formerly with the Museum of Science and Industry in Tampa, FL. A celebration of her life will be held at the Temple Terrace Presbyterian Church in Temple Terrace, FL, on June 27, 2019 at 3 p.m.

Giant-Screen and IMAX Theaters in 2018



The 187-seat IMAX theater on board the Carnival Horizon has a screen 43 feet (13 meters) wide.

(from **THEATERS** on page 1)

that is expected to open in 2020. Previously operated by a for-profit subsidiary of its science center owner, the **Cité des Sciences et de l'Industrie**, the revamped venue will be operated by European cinema chain **Pathé Gaumont** when it reopens.

A former IMAX theater in Australia's **Dreamworld** theme park that had converted to non-IMAX digital in 2011 closed at the end of 2018 to be converted to a flying ride. And an 8/70 dome theater at a resort in Sweden was demolished after years of inactivity.

Five IMAX theaters in multiplexes also closed in 2018.

We have recently learned of a few closures that occurred before 2018 that we hadn't noted in previous reports. Most notably, the **Futuroscope** theme park near Poitiers, France, which at one point had six IMAX theaters in different configurations, converted its IMAX 3D theater to a live stage in 2015 and demolished the Solido theater (3D IMAX Dome) in 2017. The 29-year-old **OMNIMAX** theater remains standing but will be dark this year and its future is uncertain. (We will continue to count it until it is definitively closed or decommissioned.)

This leaves the park's original 1987 IMAX theater, in its distinctive crystal-like building, as the only IMAX theater remaining in the park. It was converted in 2016 from 2D 15/70 film to the first-gen IMAX laser system, known within Imax as "GT." (Futuroscope is also home to the

world's only remaining IMAX Ridefilm, *Arthur: the 4D Adventure*, which uses 15/70 film but is not included in our totals.)

The IMAX 15/70 system in Beijing's **China National Film Museum** was removed in 2017, and although it was expected to get an IMAX laser system, that installation seems to have been delayed.

Planetario Puebla in Mexico reportedly replaced its IMAX 15/70 projector with a 6K fulldome system featuring six **Christie** projectors in 2012.

In addition to these, the IMAX theater at the **Minnesota Zoo**, near Minneapolis, closed at the end of January 2019 (see *The Biz, Feb-March*) although it is counted as open in this report's totals.

Conversions. Last year the Strasenburgh Planetarium at New York's **Rochester Mu-**

seum & Science Center began renovating its 65-foot (20-meter) dome theater, replacing the 24-year-old Iwerks 8/70 projector with a 4K **Evans & Sutherland** Digistar 6 with two Christie projectors. The last film show was on July 1, and the new digital system premiered early this year.

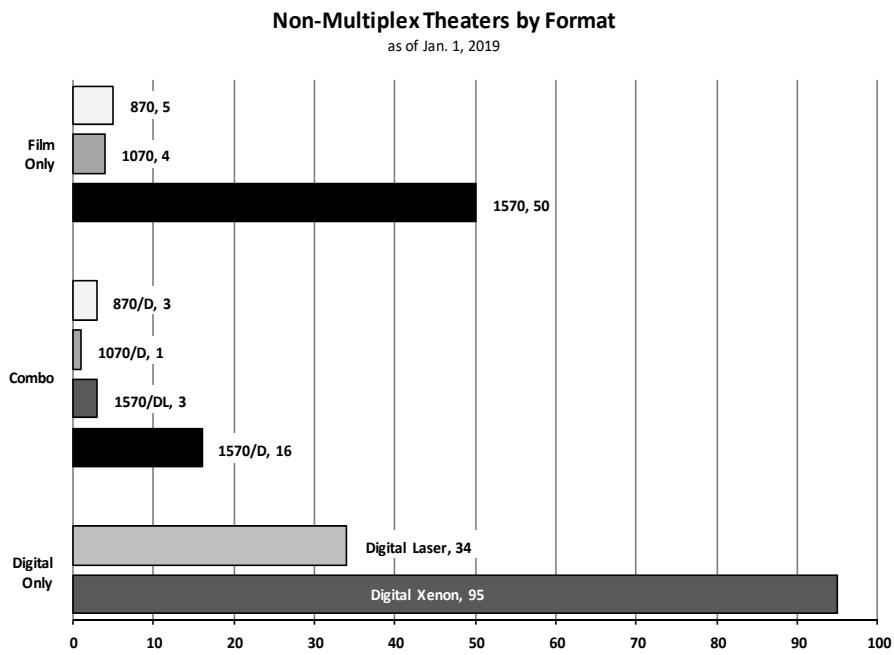
Last December the **Bibliotheca Alexandrina** in Alexandria, Egypt, replaced both its 16-year old MEGAsystems 8/70 film projector and five-year-old E&S Digistar 5 with a laser-based fulldome system from **RSA Cosmos**. Its 46-foot (14-meter) dome theaters seats 100.

The **Clay Center for the Arts and Sciences** in Charleston, WV, also removed a MEGAsystems 8/70 projector and an older fulldome system, upgrading its 61-foot (17-meter) Caperton Planetarium last November to a new 6.5K E&S Digistar 6 with five Christie Boxer projectors.

Science City in Kolkata, India, installed a **Zeiss** Powerdome 6.5K fulldome system using six Christie projectors in its 76-foot (23-meter) Space Theater, removing the **GOTO** 10/70 film projector that had



Paris' *La Géode* closed in late 2018 and will reopen with a new format next year.



been in place since 1997.

As we have reported previously (see articles in the Summer and Sept.-Oct. 2018 issues), Imax Corporation introduced two new single-projector 4K laser systems in 2018. Unlike the original IMAX GT laser system, introduced in late 2014, the new “commercial” laser system was designed specifically for multiplexes. It features a single projector, not two, and projects the standard digital aspect ratio of 1.9:1, instead of the GT laser’s 1.43. In the last half of the year IMAX multiplex customers upgraded 17 of their theaters to the commercial laser from earlier, xenon lamp-based 2K digital systems. No GT laser systems were installed in 2018.

Imax’s other new laser system was designed for domes, and features a single 4K projector. Two museum dome theaters – the **Cincinnati Museum Center** in Ohio, and the **Tech Museum of Innovation** in San Jose, CA – removed their 15/70 film projectors last year to install it. (At least three more IMAX dome theaters have signed deals for the system.)

Lasers

Starting in 2014, laser-illuminated projectors began to replace older xenon lamp-based projectors with laser light sources that are brighter and more efficient, reducing electrical consumption and heat, and

eliminating the trouble and expense of periodic lamp changes. Most laser projectors are modular, meaning that the number of laser devices installed in a projector can be customized to the needs each specific location. Laser modules have lifespans of 30,000 hours or more, compared to around 3,000 for xenon lamps.

As of Jan. 1, 2019, there were 110 IMAX and GS theaters with laser projectors, eight of which share their booths with a 15/70 film projector. Of those 110,

68 are in multiplex theaters, where 33 are the new IMAX commercial laser system; the rest are the two-projector IMAX GT laser. As noted above, 17 of the commercial laser installations were upgrades from the first-gen IMAX digital system, the rest are new installations.

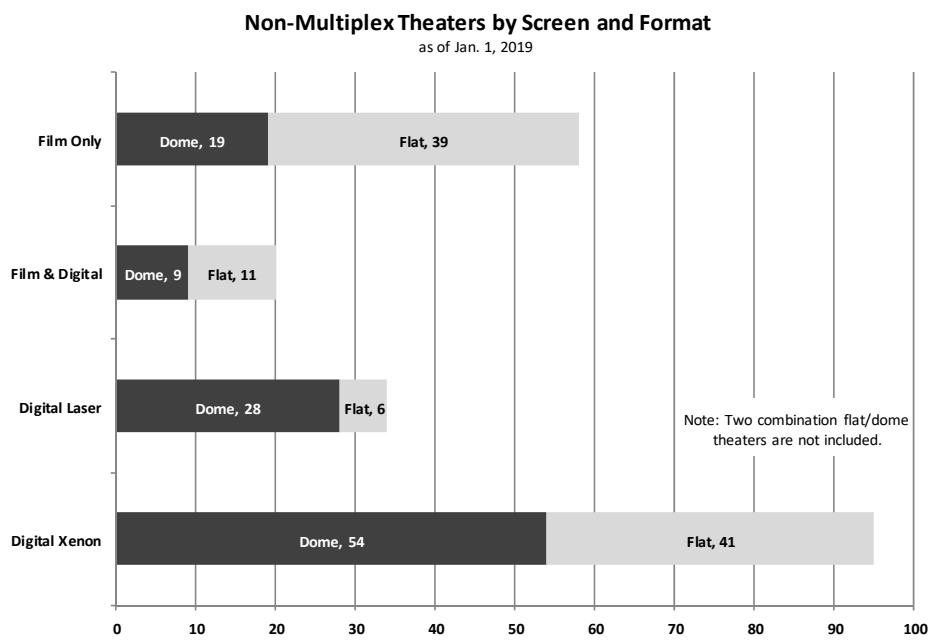
Among non-multiplex theaters, 37 have a laser system, of which three also have 15/70 projection. Of the 37, 23 are IMAX GT lasers, eight use Christie projectors, and four have **Barco**. Suppliers of these non-IMAX systems include **D3D Cinema**, Evans & Sutherland, and its subsidiary, **Spitz, Inc.**

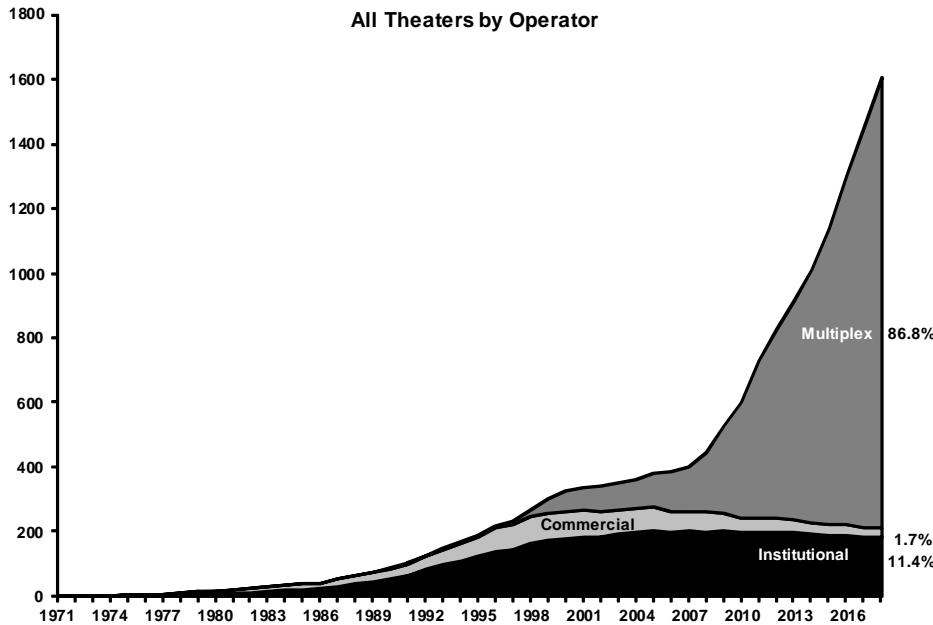
Film theaters

As of Jan. 1, 2019, there were 120 theaters capable of showing 70mm film, of which 106 have 15/70 equipment, nine have 8/70, and five have 10/70. Of the 106 15/70 venues, 50 are film-only, 48 also have xenon-based digital projectors, and eight share their booths with laser systems. The number of film projectors dropped by 12 in 2018.

8/70. The 8-perf, 70mm format was introduced as a less expensive alternative to 15/70 projection in 1987, and over 100 systems were installed over the next 20 years. According to our research, only eight appeared to remain in place and operational as of Jan. 1, 2019, and alt-

(see **THEATERS** on page 8)





(from *THEATERS* on page 7)

ough we attempted to contact each of them, a few did not reply to our queries. Therefore we can only say with certainty that two theaters continue to run 8/70 prints: **Oekopark Hartberg** in Austria, where the 256-seat Maxoom theater offers daily screenings from a library of 16 classic GS films; and the Paulucci Space Theater at **Hibbing Community College** in Hibbing, MN, which runs one or two public shows per month.

There are at least three theaters that still have a working 8/70 projector, but have stopped using it: the Big Green Screen in the **Tom Ridge Environmental Center** in Erie, PA; the **Kenner Planetarium** in Kenner, LA; and the Tien MegaDome at the **Chabot Space and Science Center** in Oakland, CA. Since it is possible that these film projectors could be resurrected, they remain in our counts.

The websites of two theaters in China, the **Shenyang Science Centrum**, and the **Jiangxi Science and Technology Center** in Nanchang, and one in Greece, the **Thessaloniki Science Center and Technology Museum**, refer to or depict their 8/70 projectors, but do not appear to list any screenings of GS films. Until we obtain confirmation that their film projectors have been removed or disabled, we will continue to list them.

10/70. Japan's GOTO Optical Manu-

facturing Co. introduced the Astrovision 10-perf, 70mm format in the mid-1990s to allow its opto-mechanical planetarium customers to screen GS films along with planetarium shows. Some 35 of these systems were installed between 1997 and 2009, and five remain operational and in regular use today, although the number of films available in the format is quite small. Nevertheless, we have learned that a major GS distributor struck a new 10/70 print for one of these theaters in the past year.

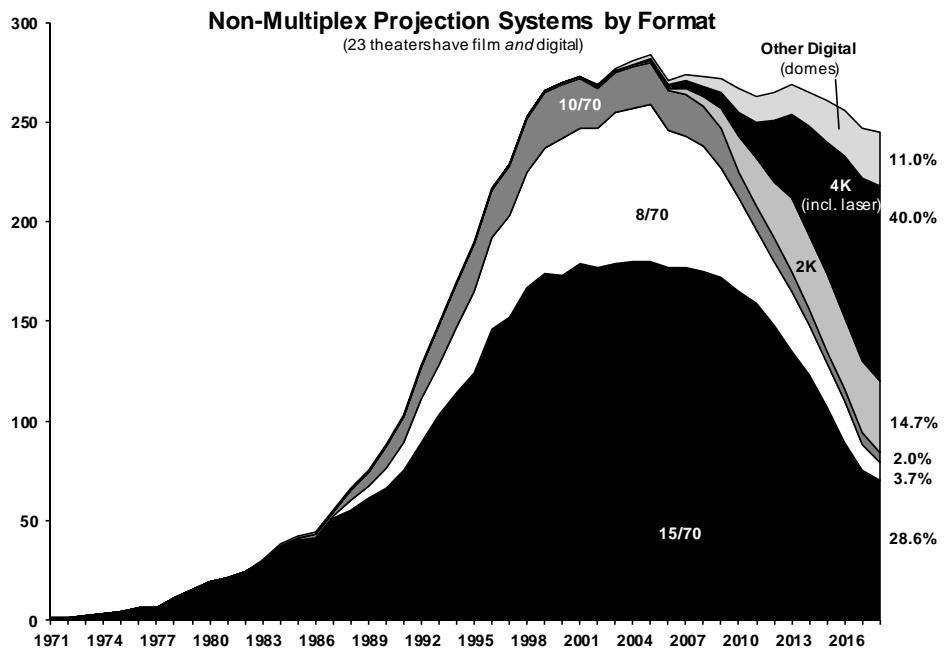
15/70. Projectors capable of running

15/70 film, the original giant-screen format invented in 1970 by **Graeme Ferguson**, **Roman Kroitor**, and **Bill Shaw**, the co-founders of Imax Corporation, were in place in 106 theaters as of the first of this year, a drop of seven systems over the past year. Of these, more than half (56) share the booth with a digital system.

However, although they are in place and nominally operational, a significant minority of the 106 film projectors are very rarely used. Thirty-six are in multiplexes and have not been used in years, sitting alongside IMAX digital projectors that are used every day. These multiplex film projectors are being held in reserve for the chance that another major Hollywood film will be released on 15/70 film. The last was **Christopher Nolan's Dunkirk** in 2017, and the next will be Nolan's next film, expected in 2020. After that, it's not clear whether any future Hollywood films will ever be printed to 15/70.

Of the 39 15/70 prints made of *Dunkirk*, less than half were screened in multiplexes; most were booked in institutional theaters that use their film projectors every day. So even though they are ready, many of the multiplex 15/70 systems may not be called back into service next year.

Therefore the actual number of 15/70 projectors in regular use is about 70, and 20 of these share their load with a digital projector.



Since 2011, the number of 15/70 machines being removed each year has averaged about 18, but 2017's 14 and last year's seven could indicate a slowing in the trend. Before 2018 the trend line suggested that the last film projector could disappear as soon as 2023. If the past two years are a sign, that date might be put off for several more years.

Of course, as we've said previously, given the legendary durability of Bill Shaw's engineering, any theater that wanted to keep projecting film — whether out of pride, principle, parsimony, or pigheadedness — could probably persist as long as it had projectionists and prints.

2D vs. 3D, dome vs. flat

In the digital era, virtually all new projection systems are 3D capable. All 1,392 multiplex IMAX theaters can show 3D, although in the face of a public dissatisfaction with the format, Imax Corp. has chosen to de-emphasize 3D, and is releasing most new Hollywood films only in 2D.

Among the 83 non-multiplex flat-screen digital theaters we count, only eight are 2D installations, and seven of those are destination theaters with a signature film that was not shot in 3D. Including film projectors, only 15 out of 114 flat-screen



Maxoom (left), in Austria's Oekopark Hartberg, is one of the world's only operating 8/70 theaters.

theaters are 2D only.

In the case of domes, that ratio is reversed: only ten out of 98 GS dome theaters are 3D capable, all of them with digital systems. As mentioned above, the last film-based 3D dome system was the IMAX Solido theater at Futuroscope, which was closed in 2017. (The only other permanent Solido theater was in Tokyo and

operated between 1992 and 2002.)

True giant screens

The Giant Screen Cinema Association defines "giant screens" as domes that are at least 60 feet (18.3 meters) in diameter, and flat screens at least 70 feet (21.3 meters) wide or at least 3,100 square feet (288 square meters) in area, with all seats placed less than one screen width from the screen plane.

As of Jan. 1, 2019, 251 theaters worldwide met that standard, a drop of two from the previous year. Included in this number are 79 multiplex theaters, all of which were originally built as 15/70 IMAX houses. Sixty percent of the total (147) are digital-only, 20% (52) have both film and digital, and the remaining 20% (52) are film-only.

Giant fulldomes

As we have pointed out in the last few annual reports, the convergence of giant-screen and fulldome theaters has been steadily growing over the past few years. More and more digital domes that previously operated primarily as planetariums, with an emphasis on astronomy shows, have begun screening GS films, which offer more live-action photography, higher production values, and a wider variety of

(see **THEATERS** on page 10)



The Jennifer Chalsty Planetarium at the Liberty Science Center in Jersey City, New Jersey, replaced its IMAX 15/70 film projector with a ten-projector 8K Digistar 6 fulldome system from Evans & Sutherland in 2017.

(from **THEATERS** on page 9)

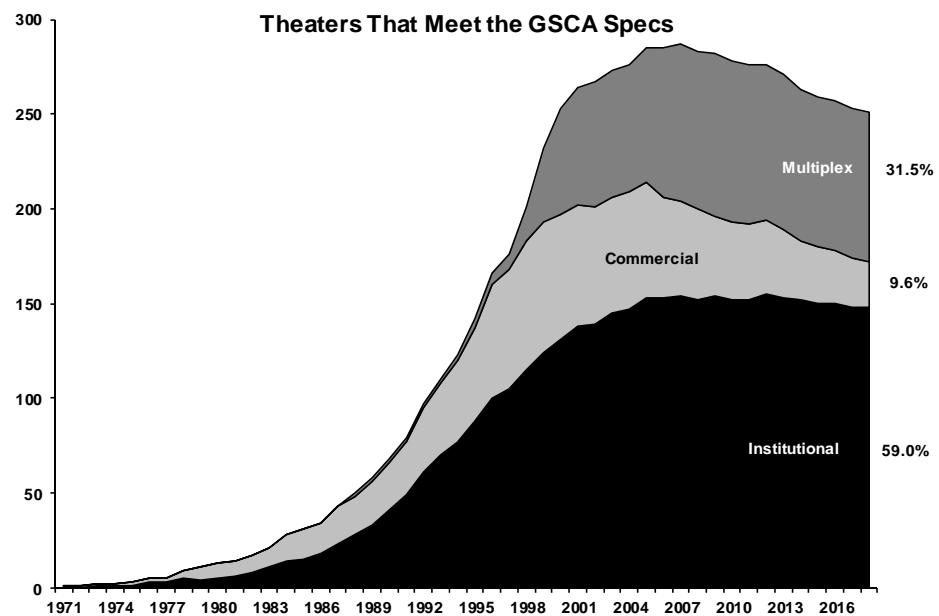
topics than most fulldome shows.

The global total of digital fulldome theaters tops 1,650, and about 120 meet the GSCA standard for true giant screens, according to **Loch Ness Productions**, which maintains an online database of fulldomes. However, only a small fraction of those theaters are viable candidates for booking GS films: most are small, or not open to the public, or unwilling or incapable of paying the per-head royalty fees that most GS producers require.

Fulldomes can provide GS distributors with a significant source of ancillary revenues, although on average they have lower attendance and pay lower royalty fees than GS domes. Distributing to fulldomes usually requires the system hardware vendor to act as sub-distributor to convert the shows to the nearly unique configuration of each fulldome theater. This naturally reduces the net revenue to the distributor.

Despite this, a growing number of producers find it worthwhile to create dome-specific versions of their new releases to include not only GS domes, but also fulldomes. Digital technology makes it relatively simple to warp GS images to make them more suitable for dome viewing, enhancing the immersive experience of those venues.

The digital convergence does not only mean that digital planetariums are show-



ing live-action GS films, it also means that former GS film theaters are moving toward star shows. In the pre-digital era, many GS dome theaters also had optomechanical planetarium systems, and many planetariums installed film a projector in one of the three frame sizes to augment their programming options. In the digital era the same projection system can do both jobs, simplifying installation, sight-line issues, and operations.

In the past few years several high-profile GS domes that started out with IMAX

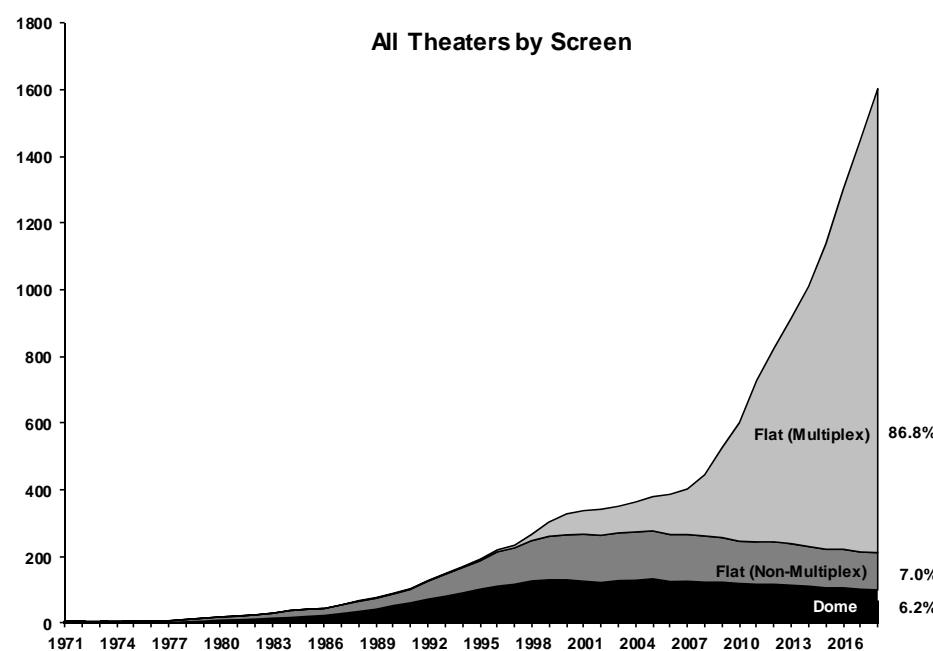
film projectors have switched to fulldome systems and added astronomy shows to their schedules, including the **Liberty Science Center** in Jersey City, NJ, the **Cradle of Aviation** in Garden City, NY, and Wisconsin's **Milwaukee Public Museum**.

Evans & Sutherland, a leading provider of fulldome systems, is now actively courting the GS market, offering Digistar for domes and ESX for flat screens. As we report elsewhere in this issue (see page 1), its latest entry is DomeX, a direct-view LED dome system that does away with projectors altogether. E&S has taken the lead in converting GS films for fulldomes.

Imax's scorecard

Once digital projectors became standardized and widely available with the launch of the **Digital Cinema Initiatives** spec in 2007, and with the rollout of the first IMAX digital system in 2008, IMAX projection systems were no longer literally ten times better than conventional cinema (the ratio between the areas of 15/70 and 35mm frames). This put Imax Corporation in competition with a much larger number of digital projector makers and systems integrators, and as institutional theaters' IMAX leases began to expire, the company began to lose clients.

Shortly after that we added this scorecard to our annual report to track Imax's performance in holding on to existing



customers and gaining new ones in the non-multiplex world.

As of this writing, Imax has converted 44 non-multiplex theaters from IMAX film to IMAX digital, and it has signed three more dome theaters to take its laser dome product.

At the same time, 45 former IMAX theaters have converted to or added digital and either removed their IMAX film projector or kept it (because they owned it outright) while dropping the IMAX brand.

Many other theaters can be considered as losses for Imax: those that originally had a non-IMAX film system, meet the GSCA spec for giant screens, and might have selected an IMAX digital system, but chose not to. The vast majority of them are dome theaters, and since the IMAX laser dome solution was only rolled out in

the middle of 2018, it may not be entirely fair to consider all of the 26 giant dome theaters that have switched from film to digital in the last decade as losses. However, there are nine flat-screen GS theaters that might have opted for an IMAX system, but for whatever reason did not.

Now that the IMAX dome laser system is available, it remains to be seen how it will fare in the marketplace against competition from fulldome vendors and others, like D3D Cinema, that offer digital dome solutions. The promise of LED systems, like E&S' DomeX, adds a new option that was probably not previously considered by theaters contemplating a digital conversion.

Non-participating theaters

The primary motivation for this report

is to provide all stakeholders in the GS industry with a snapshot of the global inventory of GS theaters. We have always attempted to be as inclusive as possible, including, for instance, theaters that do not meet the GSCA standard for a giant screen but which have booked GS films and actively participated in the community in other ways. Our practice of continuing to count theaters with operational film systems, even if they haven't used those projectors in years, leaves open the possibility that they may in the future.

The disadvantage of this practice is that it paints a somewhat too optimistic picture of the potential market for GS film bookings. This is most important to GS producers and distributors and their sponsors and other funders. It is already difficult to

(see *THEATERS* on page 14)

Imax's Scorecard

The following **non-multiplex theaters** have converted to or added a digital projection system to a booth that once had a giant-screen film projector. Unlike the rest of this report, which only counts theaters opened before Jan. 1, 2019, this table lists some theaters that have opened, or will open, in 2019 or beyond.

Wins (IMAX film to first-gen IMAX digital)

1. Suzhou Culture & Arts Centre, China	2010
2. Virginia Air and Space Center, Hampton	2010
3. Challenger Learning Center, FL	2010
4. Denver Museum of Nature and Science, CO	2010
5. Clark Planetarium, UT	2010
6. World Golf Hall of Fame, FL	2011
7. Marbles Kids Museum, NC	2011
8. Pacific Science Center, WA (PACCAR Theater) ¹	2011
9. Xian Da Ming Palace, China	2012
10. Esquire IMAX Theatre, CA ¹	2012
11. Jordan's Furniture, Natick, MA	2012
12. British Film Institute, London, UK ¹	2012
13. Museum of Marine Science & Technology, Taipei	2012
14. Tropicana Casino And Resort, NJ	2013
15. Glasgow Science Center, UK	2013
16. LG IMAX Theatre Sydney, Australia (<i>closed</i>) ^{1,6}	2013
17. Navy Pier IMAX Theatre, IL ^{1,3}	2013
18. National Media Museum, UK	2015
19. Indiana State Museum, IN	2016
20. Cinépolis IMAX Toluca Centro	2016
21. Maryland Science Center, Baltimore	2019

Wins (IMAX film to IMAX laser system)

22. Pacific Science Center, WA (Boeing Theater)	2015
23. Smithsonian Udvar-Hazy, VA	2015
24. Melbourne Museum, Australia	2015
25. Jordan's Furniture, Reading, MA	2015
26. Telus World of Science Edmonton, AB	2015
27. Tennessee Aquarium, Chattanooga	2016
28. Science North, Sudbury, Canada	2016
29. Auto and Technik Museum, Sinsheim, Germany	2016
30. Smithsonian Air and Space, DC	2016
31. IMAX Victoria, Canada	2016
32. Branson IMAX, MO	2016
33. Kinemax, Futuroscope, France	2016
34. Bullock Texas State History Museum, TX	2016
35. Montreal Science Center, Canada	2017
36. Scientific Center of Kuwait	2017
37. Ontario Place, Toronto, Canada ¹	2017
38. Kennedy Space Center, FL ⁸	2018
39. Tech Museum of Innovation, CA ⁹	2018
40. Cincinnati Museum Center, OH ⁹	2018

Wins (IMAX digital to IMAX laser system)

41. CineStar Event Cinema, Germany	2015
42. Liaoning Science & Technology Museum, China	2016
43. Museum of Discovery and Science, FL	2016
44. Papalote Childrens' Museum Monterrey	2017

Wins (Signed for laser system, not installed yet)

45. Science Museum of Minnesota ^{3,9}	2017
46. Saint Louis Science Center, MO ^{3,9}	2019
47. Museum of Science, Boston, MA ^{3,9}	2019
Losses (IMAX film to non-IMAX digital)	
1. Swiss Transport Museum, Lucerne ²	2008
2. Moody Gardens, TX ^{2,5}	2009
3. Science Museum, Osaka ³	2009
4. 63 City, South Korea ² (<i>closed</i>)	2010
5. Dreamworld, Australia	2011
6. Hastings Museum, NE	2011
7. Millennium Point Cinema, UK (<i>closed</i>)	2011
8. Taipei Astronomical Museum, Taiwan ³	2011
9. Houston Museum of Natural Science, TX	2011
10. Evergreen Aviation Museum, OR	2012
11. Cradle of Aviation Museum, NY ^{2,3}	2012
12. Putnam Museum of History and Natural Science, IA	2012
13. Kansas Cosmosphere and Space Center ³	2012
14. Milwaukee Public Museum, WI ¹²	2013
15. Air Force Museum Theater, OH	2013
16. Polynesian Cultural Center, HI	2013
17. Oregon Museum of Science and Industry	2013
18. Malecon 2000, Ecuador	2013
19. Kentucky Science Center, Louisville	2014
20. Memphis Pink Palace Museum, TN	2014
21. Science Museum of Virginia, Richmond ³	2014
22. Yellowstone Giant Screen Theatre, MT	2014
23. Virginia Aquarium and Marine Science Center	2014
24. Whitaker Center for Science and the Arts, PA	2014
25. Energy Giant Screen Theatre, LA	2015
26. National Infantry Museum, GA ⁵	2015
27. National Science and Technology Museum, Taiwan	2015
28. National Museum of Natural Science, Taiwan ³	2015
29. Saitama City Space Theater, Japan ³	2015
30. Science Centre Singapore ³	2015
31. Naval Aviation Museum ⁵	2016
32. The Henry Ford, MI ⁵	2016
33. Canadian Museum of History, QC ^{2,5}	2016
34. New Mexico Museum of Space History ³	2016
35. Great Lakes Science Center ^{3,5}	2016
36. Arizona Science Center ³	2016
37. Tokorozawa Aviation Museum	2016
38. Fernbank Museum of Natural History, GA ⁵	2017
39. Museum of Science and Industry, Chicago ^{3,5}	2017
40. Carnegie Science Center ^{6,7}	2017
41. Liberty Science Center, NJ ⁴	2017
42. Omaha Zoo	2018
43. Hamaoka Nuclear Exhibition Center, Japan ^{3,5}	2018
44. La Géode, Paris, France ⁶	2018
45. U.S. Space and Rocket Center, AL	2019

Losses (non-IMAX film to non-IMAX digital, meet GSCA specs)

46. Zion Canyon Giant Screen Theater, UT (<i>closed</i>)	2008
47. Rheged Centre, Penrith, UK	2009
48. Cinecitta Multiplexkino, Germany	2010
49. COSI Columbus, OH	2011
50. New Mexico Museum of Natural History and Science	2011
51. Kansas City Union Station, MO	2013
52. Vulcania, France	2015
53. Hearst Castle Theater, CA ⁶	2017
54. Swaminarayan Akshardham, India ⁵	2019

Losses (non-IMAX dome to non-IMAX digital, meet GSCA specs)

55. Subaru Space Science Hall, Japan ³	2008
56. Shonandai Cultural Center, Japan ³	2009
57. Mie Adventure Park, Japan ³	2009
58. National Planetarium, Malaysia ³	2009
59. Central Texas College, Killeen ³	2010
60. Sanuki Children's Center, Japan ³	2010
61. National Science Museum, South Korea ³	2010
62. Mayborn Planetarium, TX ³	2010
63. Yamanashi Science Museum ³	2010
64. Louisiana Art and Science Museum, Baton Rouge ³	2011
65. Telus Spark, Calgary, Canada ³	2012
66. Koriyama Municipal Science Museum, Japan ³	2012
67. Tamakuroto Science Center, Japan ³	2012
68. Washington Pavilion of Arts and Sciences, SD ³	2012
69. Mukai Chiaki Children's Science Museum, Japan ³	2013
70. Pushpa Gujral Science City ³	2013
71. Kurashiki Science Center, Japan ³	2014
72. Tondabayashi Subaru Hall, Japan ³	2014
73. Davis Planetarium, MS ³	2014
74. Bhasani Novo Theatre, Bangladesh ³	2014
75. Fukui Children's Science Centre, Japan ³	2014
76. Eugenides Planetarium, Greece ³	2015
77. Clay Center for the Arts and Sciences, WV ³	2015
78. Maloka Interactive Science Center ³	2016
79. Rochester Museum and Science Center	2018
80. Science City, Kolkata, India ³	2018

Notes

- Kept IMAX film projector, added IMAX digital
- Kept IMAX film projector, added non-IMAX digital, dropped IMAX brand
- Tilted dome
- Will get IMAX laser system
- Non-IMAX laser
- Closed, will reopen in 2020.
- Converted from dome to flat screen.
- IMAX "commercial" laser system
- IMAX dome laser system



* New listing.

All films are 3D unless noted; underlined titles are 2D.

Updated information is printed in bold.

Unless noted, all films run about 40 minutes.

Secrets of the Universe

Stephen Low Company; distributor: K2 Studios; director: Stephen Low; producer: Pietro Serapiglia; executive producers: K2 Studios. Narrator: Simon Helberg. Release: July 12, 2019.

Asteroid Impact

Imax Corporation, Huahuang Pictures; distributor: Imax Corporation; director: W.D. Hogan; producers: Jini Durr, Phil Groves; DP: Sean MacLeod Phillips; script: Phil Groves; executive producers: Anna Chi, Phil Groves. Cast: Len J. Phillips, Steve Tsang, Bernadette Janssen. Release: Oct. 4.

- Principal photography is complete, post-production is under way.

Out of Bounds

Wild Pacific Media; distributor: K2 Studios; director: Caspar Mazzotti; producers: Nick Robinson, Dave Gross, Mark Kresser; DP: Nick Robinson; script: Mark Krenzen, Caspar Mazzotti. Cast: Torah Bright. Release: October.

Back From the Brink

Sean Casey Productions; distributor: Cosmic Picture; director, DP: Sean Casey; producers: Jen Casey, Sean Casey; script: Mose Richards. Release: Fall.

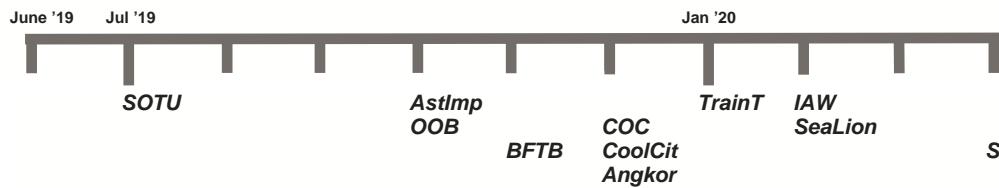
- Early 2019: Winter shoot with snub-nosed monkeys in the foothills of the Himalayas in China
- Filmed bald eagles and golden eagles being captured and tagged in California
- Principal photography is complete, post production is under way.

Colours of China

Making Movies/ China Intercontinental Communication Company/Gebrueder-Beetz Filmproduktion; distributor: tba; executive producer: James Heyward. Release: December.

Cool Cities

Wild Pacific Media; distributor: K2 Communications. Release: December.



Lost Empire of Angkor

Definition Films, Helio Projects; distributor: K2 Studios; director: Murray Pope; writer: John Weiley. Release: 2019.

Train Time

Stephen Low Company; distributor: Stephen Low Company; director, script: Stephen Low; producers: Pietro Serapiglia, Stephen Low; executive producer: Paul Globus. 2D. Release: January 2020.

- Principal photography is complete, post production is under way.

Into America's Wild

MacGillivray Freeman Films; distributor: MacGillivray Freeman Films; director: Greg MacGillivray; producer: Shaun MacGillivray. Release: February 2020.

- April: Pickup shots and aerials in Washington state, Oregon, Utah, Texas, and Appalachian Trail.
- May: Two-week shoot in downtown Charleston, NC, Cypress Gardens, and Middleton Place.
- Post production is under way.

Sea Lions: Life by a Whisker

Definition Films; distributor: K2 Studios. Directors, writers: Amelia McCarten, Paul Phelan; producers: David Gross; DPs: Jon Shaw (underwater), Cameron Batten, Tim Nagle (topside). Release: February 2020.

Snow

St. Thomas Productions, nWave Studios; distributor: nWave Pictures; directors: Cyril Barbançon, Jacqueline Farmer; producer: Jacqueline Farmer; DPs: Cyril Barbançon, Jacqueline Farmer; script: Philippe Chappuis; score: Franck Marchal; executive producer: Eric Dillens. Release: Spring 2020.

- January: Filmed in Lake Ontario; Rochester, NY; Hautes-Alpes, France.
- February: Filming at Pays des Ecrins in southeastern France.
- Filming has wrapped for the season, will resume later in the year.

Einstein's Incredible Universe (wt)

Cosmic Picture; distributor: tba; director: Daniel Ferguson; producers: Taran Davies, George Dufield, Daniel Ferguson; script: Daniel Ferguson, Mose Richards; DP: Reed Smoot. Release: fall 2020.

Wild Wonders of China

Transcendent Media, Blue Sky Aerial & Specialist Filming; distributor: tba; director: tba; producers: Peta Milan, Staffan Widstrand, Vicky Degerfeldt; DP: Peter Degerfeldt. Release: fall 2020.

Wings 3D *

Dorsey Pictures, Archipelago Films; distributor: SK Films; Release: Fall 2020.

- May-June: Filming migratory birds in North Dakota, Nebraska, New Orleans, North Carolina.

Ancient Caves

Oceanic Research Group; distributor: MacGillivray Freeman Film Distribution; director, DP: Jonathan Bird; producers: Jonathan Bird, Art Cohen; script: Jonathan Bird, Art Cohen; score: Bruce Zimmerman; executive producer: Shaun MacGillivray. Cast: Dr. Gina Moseley, Dr. Larry Edwards, Brian Kakuk, Todd Kelly, Dr. Keith Tinker. 2D. Release: 2020.

- April: Filmed new aerial in the Bahamas.
- All photography is complete, post production is under way.

Dinosaurs of Antarctica

Giant Screen Films; distributor: Giant Screen Films; director: David Clark; producers: Don Kempf, Deborah Raksany, Andy Wood; DP: Reed Smoot; script: Deborah Raksany, Andy Wood. Release: 2020.

- January: Filmed dinosaur backplates in New Zealand.
- February: CGI compositing begins.

Elephant

Wild Expectations, Ltd.; distributor: tba. Release: 2020.

Feathered Dinosaurs (wt)

Saint Thomas Productions; distributor: nWave Pictures. Narrator: James Faulkner. Release: 2020.

Journey to the Great Mayan Reef

Milbrand Cinema; distributor: tba; director, producer, DP: Lance Milbrand; editor: Dave Choice; score: Icarus Music. Cast: Kathleen Dudzinski, Eldon Bolton. Release: 2020.

- April-June: Filming topside and underwater in Belize.

Ocean Currents (wt)

Wild Pacific Media, Definition Films; distributor: K2 Studios; director: Nick Robinson; producers: Nick Robinson, Sarah Beard, David Gross; DP: Jon Shaw. Release: May 2020.

Secrets of the Sands

Atlantic Productions; distributor: Serengeti Entertainment. Release: 2020.

Wingsuit Flyers

Grand Schema; distributor: K2 Communications; director: Christopher J. Scott; producers: John Molli, Christopher J. Scott, Aschi Michel, Tom Fore; DP: Robert Hollingworth; script: Christopher J. Scott; executive producers: Rob Sharps, Doug Greenstein, W. Kyle Gore, Daniel Verbic, Tom McCollum. Release: 2020.

Blue Whales

Oceanic Films; distributor: tba; director: Hugh Pearson; producers: Hugh Pearson, Myles Connolly; DP: Hector Skevington-Postles; writers: Hugh Pearson, Myles Connolly. Cast: Diane Gendron. Release: March 2021.

- March: Three-week expedition to the Sea of Cortez to film whales and scientist who studies them.

Jul '20

Jan '21

July '21

EIU
WWOC
Wings

AncCav
DOA

Eleph
FeaDin
JTGMR

OceCurr
SSands
Wingsuit

BluWha

AntiTU

Ireland
Leonar

Antarctica 3D: Into the Unknown

BBC Earth; distributor: SK Films; director: Fredi Devas; producers: Jonny Keeling, Myles Connolly; executive producer: Jonathan Williams. Release: 2021.

– Early 2019: Filmed in the Antarctic Peninsula and South Georgia Island.

Ireland

MacGillivray Freeman Films; distributor: MacGillivray Freeman Films; director: Greg MacGillivray; producer: Shaun MacGillivray. Release: 2021.

– Principal photography is complete, post production is under way.

Leonardo da Vinci: The Last Interview (wt)
 Camera Lucida Productions; distributor: MacGillivray Freeman Films; director: Francois Bertrand; DP: Vincent Mattias; script: Serge Bramly, Francois Bertrand. Executive producer: Francois Bertrand. Release: 2021.

DMR FILMS:

Title	Dist	Release
Dark Phoenix	FOX	6/7/19
Men in Black International	SONY	6/14/19
Toy Story 4	WDPD	6/21/19
Annabelle Comes Home	WB	06/28/19
Spider-Man: Far from Home	SONY	7/5/19
The Lion King	WDPD	7/19/19
IT: Chapter 2	TBD	9/6/19
Joker	WB	10/4/19
Frozen 2	WDPD	11/22/19
Star Wars: Episode IX	WDPD	12/20/19



Filming for Dinosaurs of Antarctica on the Oparara River in New Zealand's South Island.

(from **THEATERS** on page 11)

obtain hard data to form the basis for film and marketing budgets, and an overstated total for the number of active GS theaters is no help.

So we must be clear that although, according to our admittedly generous standards, there are nominally 211 non-multiplex GS theaters, the actual number from which GS distributors can realistically expect to obtain bookings is considerably smaller. Although we cannot be precise, we offer the following data points to suggest the upper limit of active GS theaters.

According to our bookings listings (which are not comprehensive, despite our best efforts to make them so) there are at least 40 theaters that did not book any GS films in calendar 2018, and 19 of these have had no bookings in the last five years.

Add to these a handful of destination theaters that rarely, if ever, run anything other than their signature films, and the conclusion is that the actual market for the average GS film is in the neighborhood of 160-180 theaters.

The future of film

A factor that has seemed to cast a pall over the future of the GS industry for many years has been the assumption that at some time in the future motion picture negative and print stocks will no longer be affordable or even available. Operators of smaller theaters in particular may have worried that the price of 70mm prints could become prohibitive before they were able to raise the funds to convert to digital projection. Producers, distributors, and exhibitors might have been concerned that as the number of productions captured on film and the number of film theaters dropped, the cost of stocks and processing would increase.

Of course, as with most electronic technologies, the cost of digital cameras and projectors has decreased while the quality

has increased, making the conversion less painful and somewhat ameliorating the concerns about the fate of film.

But according to the two companies most concerned in the manufacture and processing of 70mm motion picture stock, fears of the death of film have been greatly exaggerated. **Kodak's Vanessa Bendetti**, global managing director for motion picture and entertainment, tells *LFX* that the company "is seeing an incredible uptick in camera negative films sales, in all formats. Film use is growing, and with it the reinvestment in the infrastructure for film by Kodak and other production/post-production vendors." She says that sales of 8mm, 16mm, and 35mm stocks are up,



Rumors of the death of 70mm film may have been exaggerated.

adding that "while annual 65mm sales tend to fluctuate depending on who is shooting, we have four features opting for 65mm this year, and a number of productions with planned 70mm releases. Our 2019 65mm sales will likely exceed three times our 2015 volume, and year-over-year 70mm sales are quite stable."

She concludes, "An expectation of decline, higher prices, or the end of manufacture of these products is unfounded, from Kodak's perspective."

Andrew Oran at **FotoKem** in Burbank, CA, the only lab in the world still capable of making 70mm release prints, is similarly optimistic, telling *LFX* that "FotoKem continues to support all aspects of 65mm

capture and post-production. This includes processing, scanning, film recording, and printing: activities that still happen here on a weekly, if not daily, basis." He also points out that work in other formats is growing, and he is optimistic that GS work will remain financially viable even as it continues to decline. "We've worked hard to not raise costs for filmmakers and distributors choosing film over the past few years, even as the volume of film capture and release continues to drop."

These rays of light suggest that even though film will probably disappear as a capture and exhibition format at some time in the future, that day is not near, and there is unlikely to be a crisis that would force sudden or expensive changes on GS filmmakers or theaters.

Whether any GS filmmakers or theaters continue to use film long after its digital counterparts become clearly superior, like audiophile fans of vinyl records, remains to be seen.

The digital future

On page 1 of this issue we report on the coming of LED-based dome systems, and we have previously reported on the use of LED displays in flat-screen cinemas (*April-May 2017*). The emergence of LED dome systems opens a whole new vista for the 38 remaining GS film domes, most of which will probably face the transition to digital in the next decade. To say nothing of dozens of non-digital planetariums and older digital fulldome or GS domes that may be ready to upgrade in the next few years.

LED displays, flat or dome, offer the potential for cinema experiences unlike anything the world has ever seen before, with brightness and contrast at near daylight levels. Although the initial expense will be high — but commensurate with the increase in performance — total cost of ownership may ultimately be comparable to or even lower than projection systems, particularly if significant price drops oc-

cur.

For most of the 50 years that GS theaters have existed, they have offered an experience that was clearly distinct from – and better than – that of conventional movies. The difference between an image projected from a postage stamp-sized 35mm frame and a business card-sized 15/70 frame was immense and obvious to everyone. Since the start of the digital cinema era a decade ago, that distinction has been declining. The difference between an image projected by an IMAX laser projector and the same image displayed by any other laser projector is far more subtle and difficult to perceive.

The producers and exhibitors of original GS films can no longer rely on mere screen size or even aspect ratio to differentiate their offerings from those of conventional theaters. *LFX* has long urged the GS community to seriously consider such advanced technologies as High Frame Rate and High Dynamic Range to enhance the realism and immersiveness of the GS experience and further differentiate it from ordinary movies. LED displays, flat and dome, could offer another novel and dramatic way for GS theaters to regain the unique standing they once held in the pantheon of immersive experiences.

Doing these things will not be cheap or easy. But if we do nothing to raise the profile of the GS experience above the multitude of out-of-home entertainment options, the number of GS theaters will continue to decline and the world's greatest cinematic medium will eventually fade to black.

Acknowledgements

We would like to thank the following people for providing vital information that made this report more accurate and comprehensive. **Adam Davis** and **Caralyn Duke** at Imax Corporation provided the company's current list of IMAX theaters worldwide. **Tadashi Kusumi** and **Masashi Nagadoi** of **Sarai, Inc.** in Japan, provided updates on the status of some of that country's GS theaters, and **William McQiu** of **ST Giant Films Ltd.** did the same for GS theaters in China. **Dick Vaughan** updated us on several British

theaters, and Futuroscope's **Dominique Prisset** informed us about the park's venues.

What we count

This report counts all operating 15/70, 10/70, and 8/70 theaters; theaters that have converted from one of those film formats to digital; IMAX digital theaters; and a growing number of digital theaters in museums, whether DCI-compliant or using proprietary formats such as D3D Cinema's laser dome system or various fulldome systems. This yields a total, as of Jan. 1, 2019, of 1,604 theaters in 77 countries worldwide.

We do not count the one remaining IMAX motion simulator (in the Futuroscope theme park in France) and because they are not open to the public, we also exclude the two IMAX systems that have been installed in private homes, the one on a yacht, or the IMAX theater at the film school of the **University of Southern California**, which is used primarily for instructional purposes. As of this year, we count the two IMAX theaters on cruise ships operated by **Carnival Cruise Lines**, because they have booked at least two original GS films.

A film theater is counted as long as it has the capability of showing one of the GS formats, even if it has stopped doing so on a regular basis. If the film projector has been removed or disabled, and no qualifying digital replacement has been installed, we consider the theater "closed."

Digital "insert" projectors, which project a relatively small image on a portion of the screen (flat or dome), are not counted as digital replacements or as dual film/digital capability in the absence of a system that fills all or most of the screen.

Thanks to data provided by Imax Corporation, we have nearly complete details on the screen dimensions of IMAX theaters worldwide. This has enabled us to improve the accuracy of our count of theaters that meet the screen-size component of the GSCA spec mentioned in the main article. That number has been growing. At the beginning of 2018 there were 485 theaters with screens over 70 feet wide, of which 343 were IMAX theaters in multi-

plexes. As of the start of 2019, those numbers were 515 and 374, respectively.

However, the GSCA requirement that all seats be within one screen width of the screen introduces uncertainty in our count, since Imax's lists do not include that data point. Since 2008, *LF Examiner* has measured the screens and seating dimensions of 130 theaters, including 91 multiplex screens, using a precise laser device. Some IMAX multiplex screens meet the GSCA spec, usually because they were built specifically as IMAX film theaters. However, very few retrofitted former 35mm theaters or new digital IMAX theaters do. Even if their screens are large enough, the auditoriums are often too deep to meet the GSCA's criteria. We therefore presume, unless we have press reports or other information to suggest otherwise, that new IMAX multiplex screens do not meet the seating criterion of the GSCA spec.

Although the vast majority (94%) of IMAX multiplex theaters fall into this category, we include them in our overall count primarily because they occasionally show the original GS documentaries films released by Imax with co-production partners like **Warner Bros. Pictures** and **Walt Disney Studios**, and because a handful of smaller chains with IMAX theaters occasionally book GS films from independent producers.

We do not count the premium large-format (PLF) theaters that many theater chains have introduced in the last few years, because they never show original GS films.

As noted in the main article, there are about 120 fulldome theaters worldwide that meet the GSCA spec that we have never listed, because they never used a GS film format. However, since many films are now being distributed in fulldome formats, *LF Examiner* is considering whether to include them in our database and in future theater reports. Your views on this topic are welcomed.

Past years' totals in this report may not agree with those in previous reports because we are constantly updating our database as we learn of theaters that opened or closed in previous periods.

Premiering in May and June



Apollo 11: First Steps Edition

Apollo 11: First Steps Edition

Produced by **Statement Pictures** and **CNN Films**, distributed by **MacGillivray Freeman Films**. Directed by **Todd Douglas Miller**, produced by Todd Douglas Miller, **Thomas Petersen**, and **Evan Krauss**. Executive producers: **Amy Entelis**, **Courtney Sexton**, **Josh Braun**. 2D. Release date: May 17.

“Timed to coincide with the 50th anniversary of the first lunar landing, *Apollo 11: First Steps Edition* gives a thrilling cinematic experience that showcases the real-life moments of the famed Apollo 11 mission. With never-before-seen 70mm footage and a newly discovered trove of audio recordings, the filmmakers reconstruct the Apollo 11 mission in astonishing detail. Audiences will experience the

exhilarating final moments of preparation, the countdown, liftoff, landing, and return of this historic mission that united the world: one of mankind’s greatest achievements. An immersive giant-screen experience that takes you straight to the heart of this intense scientific and human endeavor, *Apollo 11: First Steps Edition* leaves us marveling at human ingenuity and the impulse that led humanity to space.”

Hidden Pacific

Produced by **Tandem Stills + Motion** and distributed by **Giant Screen Films**. Directed and photographed by **Ian Shive**, produced by Ian Shive, **Erika Nortemann**, and **Mark Fletcher**, written by Mark Fletcher, and scored by **Cody Westheimer**.

(from **SHORTS** on page 24)

Endgame, which took in \$47.6 million on its first weekend in 2015. All told, the Marvel movie set new IMAX records in 50 territories, including China, France, Germany, and Japan. Its total in North America was the second-highest, after *The Force Awakens*.

As this issue went to press in early June,

Endgame’s total global gross stood at over \$2.7 billion.

Directed by **Joe** and **Anthony Russo**, *Endgame* was filmed entirely with IMAX digital cameras.

CTI renews Memphis sponsorship

Crew Training International has extended its naming sponsorship of the giant-

screen theater in the **Pink Palace Museum** in Memphis, TN, for three years. The 240-seat theater, originally built as an IMAX film theater in 1995, was converted to 4K digital projection by **D3D Cinema** in 2014. CTI has sponsored the theater since 2004.

Based in Memphis, CTI provides training services to military and civilian clients

their present environmental recovery and ecological research initiatives — provide the platform from which the film explores a diversity of science and human stories. *Hidden Pacific* was produced in cooperation with the U.S. Fish & Wildlife Service and affiliated organizations, which provided the filmmakers with unprecedented access to the bio-secure zones of the marine monuments.”

DMR Films

<i>Title</i>	<i>Dist</i>	<i>Release</i>
<i>John Wick: Chapter 3</i>	SUM	05/17/19
<i>Aladdin</i>	WDPD	05/24/19
<i>Godzilla: King of Monsters</i>	WB	5/31/19
<i>Dark Phoenix</i>	FOX	6/7/19
<i>Men in Black International</i>	SONY	6/14/19
<i>Toy Story 4</i>	WDPD	6/21/19
<i>Annabelle Comes Home</i>	WB	06/28/19

Bookings: May-June 2019 by Film

761 bookings of 96 films in 162 theaters

These listings to not include Hollywood films shown in multiplex IMAX theaters. Those films are listed when they are shown in non-multiplex theaters, and conversely, non-Hollywood giant-screen films showing on multiplex IMAX screens are also listed.

Listings shown in **bold face** below are new or updated listings. The rest are unchanged from the previous

month's issue.

The data on the following pages are *not* warranted to be comprehensive or accurate in every detail, despite our best efforts to make them so. They have been compiled from theater surveys, distributors, the Web, and other sources.

We will make every effort to improve the thorough-

ness, and accuracy of these data. If your theater or film is not shown here, please get in touch with us to update our listings.

Where a date is not shown, it means that no date was provided by the source or, in the case of a closing date, that no date has been set, or that the run is indefinite.

The key to film abbreviations is on page 21.

Film	Theater	Open	Close	Film	Theater	Open	Close	Film	Theater	Open	Close
A11FSE	Atlanta FMNH	6/1/19	5/30/20	Speyer Dome	5/17/19	5/16/20		San Jose Tech	5/15/19	6/30/20	
	Birmingham AL	5/19/19	5/18/20	Toronto OSC	5/17/19	11/16/20		Seattle PSC 2	3/29/14	6/24/19	
	Bradford	5/17/19	5/16/20	AguaScientes	4/5/19	8/5/19		Sudbury	5/3/19	6/30/19	
	Cerro Negro TA	6/4/19/19	6/13/20	Albuquerque NMNMH	7/16/18	7/15/19		Vancouver TWS	10/7/15	11/13/19	
	Cleveland	5/18/19	5/17/20	Austin Reg	3/1/19	6/1/20		Victoria DC	7/1/17	7/1/19	
	Columbus COSI	5/24/19	9/2/19	Chattanooga TA	6/22/18	6/21/19		Washington NASM	5/23/17	5/22/19	
	Dayton	5/25/19	5/24/20	Cleveland	3/23/18	3/31/20		DinoAliv	4/1/19	4/30/20	
	Dearborn THF	6/17/19	6/16/20	Columbus COSI	5/25/18	5/24/19		Fort Worth	7/15/16	9/30/19	
	Denver MNS	5/17/19	5/16/20	Dearborn THF	2/16/18	2/18/20		Houston MNS	7/1/17	6/30/19	
	Edmonton TWS	5/17/19	9/14/19	Guayaquil	4/16/19	4/15/20		Kansas City Sci	7/3/18	7/31/19	
	Fort Worth	5/17/19	5/16/20	Hague	7/3/18	7/2/19		Portland OMSI ET	1/26/18	1/31/20	
	Garden City	5/21/19	5/20/20	Hampton VASC	10/1/18	9/30/19		Port Wm	5/28/16	9/30/19	
	Hague	5/21/19	11/21/19	Hartberg	4/6/19	4/15/20		Gatineau	7/9/18	3/20/20	
	Hampton VASC	6/15/19	6/14/20	Hastings	6/21/18	6/20/19		Kolkata SC	3/1/19	12/1/19	
	Houston MNS	5/17/19	9/3/19	Indianapolis Imx	6/17/19	6/17/20		Mumbai NSC	7/1/19	12/1/19	
	Huntsville USSRC	6/1/19	5/30/20	Kokopelli	6/15/18	6/14/20		Speyer Dome	1/1/17	12/31/19	
	Hutchinson	5/17/19	5/16/20	Lubbock SS	7/6/18	7/6/19		Austin TSHM	10/1/17	9/1/19	
	Hutchinson	5/19/19	5/18/20	Lueme STM	9/1/18	9/1/19		Baltimore MSC	2/7/17	6/30/19	
	KSC 2	5/17/19	12/31/19	Memphis Pink	8/1/18	8/10/19		Bradford	1/1/18	12/31/19	
	London SM	5/17/19	5/16/20	Monterey Pap	3/15/18	4/15/20		Chantilly	2/1/17	2/16/20	
	Lucerne STM	5/24/19	8/18/19	Montreal SC	5/18/18	5/17/19		Charlotte DP	8/26/17	12/31/19	
	Memphis Pink	5/25/19	5/24/21	Moscow Kin	4/15/18	4/16/20		Cleveland	3/1/17	3/31/20	
	Norwalk MA	5/17/19	5/16/20	Pensacola NAM	2/26/19	2/27/20		Dearborn THF	2/17/17	2/18/20	
	Pensacola NAM	5/17/19	5/16/20	Pittsburgh CSC	1/25/19	1/24/20		Edmonton TWS	3/25/17	2/18/20	
	Philadelphia FI	5/17/19	5/17/20	Raleigh	9/1/18	8/31/19		Fort Worth	2/17/17	6/30/19	
	Phoenix ASC	5/17/19	5/16/20	Regina	5/11/18	5/12/19		Garden City	12/1/17	12/31/19	
	Pittsburgh CSC	5/19/19	5/18/20	Saint Augustine	6/1/18	5/30/19		Grand Rapids Cel	7/15/17	7/31/19	
	Portland OMSI ET	5/17/19	5/16/20	Saint John Tech	2/18/18	11/11/19		Harrisburg	2/18/17	3/11/20	
	Salt Paul SMM	5/17/19	5/16/20	San Jose Tech	2/17/18	11/30/19		Hastings	10/19/17	10/19/19	
	Salt Lake City Clark	6/22/19	6/21/20	Santa PSC 2	9/7/18	9/6/19		Houston MNS	2/1/17	12/31/19	
	Seattle Tech	5/17/19	5/16/20	Singapore SC	4/22/19	5/22/19		Indianapolis Imx	1/17/19	1/16/20	
	Sinshiem	5/31/19	7/19/20	Sioux Falls	2/1/19	8/1/19		Jersey City	2/17/17	12/31/19	
	Speyer Dome	5/17/19	5/16/20	Tallahassee CLC	2/16/18	2/28/20		Lansing Cel	6/30/17	7/31/19	
	Toronto OSC	5/17/19	11/16/20	Valencia Spn	7/1/18	6/3/19		London SM	9/4/17	8/31/19	
	Toulouse CDE	6/1/19	12/31/19	London BFI Ode	9/1/18	2/6/20		Louisville KSC	2/17/17	2/28/20	
	Yellowstone	5/17/19	5/16/20	Melbourne MV	7/1/16			Monterey Pap	2/2/18	4/15/20	
ACGOTS	Columbus GA NIM	5/26/17	5/31/19	Stockholm	10/1/17	10/1/19		Moscow Kin	9/10/17	6/1/19	
	Corpus Christi Lex	6/17/16		Galveston	11/17/18	11/30/19		Orlando SC	2/17/17	11/9/19	
	Dayton	6/17/16	12/31/19	Portland OMSI ET	1/26/18	1/31/20		Pittsburgh CSC	11/17/19	12/31/19	
	Hampton VASC	11/10/17	11/9/19	Saint Felicien	4/1/18	11/30/19		Port of Spain	5/3/19	5/2/20	
	Hutchinson	5/23/17	11/30/19	AsterME	4/24/18	3/30/20		Portage Cel	6/30/17	7/31/19	
	Pensacola NAM	5/26/17	6/30/20	Atlanta NMNH	1/1/18	1/10/20		Regina	2/17/17	12/31/19	
	Toronto OP	6/1/18	6/1/20	Golden City	5/10/18	6/10/20		Saint Augustine	2/17/17	6/30/20	
	Victoria DCI	5/3/19	5/31/20	Kolkatta SC	1/1/19	12/31/20		San Jose Tech	2/1/17	11/19/19	
	Washington NASM	5/26/17	6/26/20	BackWild	3/1/19	3/1/21		Seattle PSC 2	2/17/17	6/30/19	
AfricAdv	Katowice CC	9/30/19		Baltimore MSC	3/1/18			Sioux Falls	6/2/17	6/30/19	
	Krakow CC	9/30/19		Charlotte DP	11/24/18	11/23/19		Sudbury	2/1/17	6/30/19	
	Łódź CC	9/30/19		Cleveland	2/2/19	8/1/19		Thessaloniki SCTM	10/28/17	10/2/19	
	Poznan CC	9/30/19		Dearborn THF	8/1/18	7/31/19		Valencia Spn	4/1/18	6/30/19	
	Warsaw CC	9/30/19		Erie	8/4/18	6/30/19		Victoria DCI	3/1/17	12/31/19	
	Wrocław CC	9/30/19		Fort Lauderdale	6/1/18	5/31/20		Washington NASM	2/17/17	2/16/20	
AGWN	Alamogordo	6/28/18	6/28/19	Fort Worth	11/2/18	5/30/19		Edmonton TWS	9/14/18	9/23/19	
	Dongguan STM	1/1/19	12/31/19	Garden City	9/25/18	9/24/19		McMinnville	6/16/16		
	Galveston	5/31/19	11/30/19	Garza Garcia	6/27/19	10/31/19		EarthFli	6/21/18	6/30/19	
	Harbin STM	12/1/18	12/1/19	Gatineau	4/1/18	6/31/19		Everest	7/30/18	3/30/20	
	Port of OMSI ET	3/1/19	2/20/20	Guangzhou GSC	5/1/19	5/31/19		ExpChesa	3/20/19		
	Saint Louis SC	9/14/18	9/13/19	Haguenau	4/3/18	3/31/20		ExtrWeat	9/1/17	6/30/21	
	Shanghai 3D STM	1/1/19	1/1/20	Houston MNS	2/12/19	2/11/20			9/11/17	9/1/20	
	Tijuana	4/12/19	4/11/20	Jersey City	8/4/18	8/3/19			10/15/16	10/14/19	
AirRacer	Hutchinson	1/19/18	1/31/20	Lubbock SS	11/9/18	5/30/19			10/2/16	10/1/19	
AmazAdve	Austin TSHM	9/1/18	8/15/19	Lucerne STM	8/31/18	6/30/19			10/15/16	10/14/19	
	Chicago MSI	5/26/17	6/30/19	Pittsburgh CSC	8/31/18	6/30/19			10/15/16	10/14/19	
	Cleveland	1/9/18	6/30/19	Portland OMSI ET	9/7/18	9/6/19			10/15/16	10/14/19	
	Columbus COSI	1/10/18	6/30/19	Raleigh	6/4/18	6/3/19			10/15/16	10/14/19	
	Edmonton TWS	1/19/18	6/30/19	Sioux Falls	2/1/18	5/31/19			10/15/16	10/14/19	
	Erie	6/30/18	6/30/19	Sudbury	9/4/18	6/30/19			10/15/16	10/14/19	
	Houston MNS	4/21/17	12/31/19	Tallahassee CLC	10/1/18	10/18/19			10/15/16	10/14/19	
	Indiepic Imx	6/7/19		Valencia Spn	4/1/19	6/30/20			10/15/16	10/14/19	
	Kuwait SCK	6/14/18	12/31/19	Virginia Beach AMSC	6/3/18	12/31/19			10/15/16	10/14/19	
	Melbourne MV	9/15/17	9/13/19	Columbus COSI	9/15/14	6/30/19			10/15/16	10/14/19	
	Orlando SC	2/24/18	6/30/20	Davenport Put	10/1/12	4/28/20			10/15/16	10/14/19	
	Peoria RM	6/20/18	9/30/19	Edmonton TWS	6/30/18	6/30/19			10/15/16	10/14/19	
	Pittsburgh CSC	11/17/17	6/30/19	San Diego RHF	7/1/14	6/30/19			10/15/16	10/14/19	
	Portland OMSI ET	2/16/18	2/16/20	Fort Worth	6/10/17	9/30/19			10/15/16	10/14/19	
	Sacramento Imx	9/8/17	6/30/19	Boston MOS	2/15/19	2/29/20			10/15/16	10/14/19	
	Shanghai 3D STM	8/1/18	8/1/19	Chicago MSI	3/1/19	3/31/20			10/15/16	10/14/19	
	Sioux Falls	12/2/17	6/30/19	Denver MNS	10/19/18	10/31/19			10/15/16	10/14/19	
	Syracuse MOST	2/16/19	2/15/20	Edmonton TWS	2/1/19	2/28/20			10/15/16	10/14/19	
	Toronto OSC	10/6/17	6/30/20	Gatineau	3/9/18	3/31/20			10/15/16	10/14/19	
	Vancouver TWS	12/2/17	6/30/19	Gatineau	2/1/19	2/28/20			10/15/16	10/14/19	
	Victoria DCI	4/14/17	6/30/19	Highwood	2/15/19	6/20/19			10/15/16	10/14/19	
Amazon	Birmingham AL	5/19/19	5/18/20	Saint Louis SC	12/2/19	12/21/19			10/15/16	10/14/19	
	Bradford	5/17/19	5/16/20	Saint Paul SMM	3/1/19	3/1/20			10/15/16	10/14/19	
	Cleveland	5/18/19	5/17/20	Tallahassee CLC	1/18/19	6/30/20			10/15/16	10/14/19	
	Columbus COSI	5/24/19	9/2/19	Tijuana	10/15/18	10/14/19			10/15/16	10/14/19	
	Dayton	5/25/19	5/24/20	Victoria DCI	3/29/19	3/31/20			10/15/16	10/14/19	
	Denver MNS	5/17/19	5/16/20	Chattanooga TA	6/6/19	6/9/19			10/15/16	10/14/19	
	Edmonton TWS	5/17/19	9/14/19	Dayton	5/26/17	12/31/19			10/15/16	10/14/19	
	Fort Worth	5/17/19	5/16/20	Dearborn THF	2/27/17	5/31/19			10/15/16	10/14/19	
	Hague	5/21/19	11/21/19	Edmonton TWS	3/1/18	12/31/19			10/15/16	10/14/19	
	Houston MNS	5/17/19	9/3/19	Gatineau	9/1/15	12/31/20			10/15/16	10/14/19	
	Hutchinson	5/19/19	5/18/20	Hampton VASC	10/17/18	10/17/19			10/15/16	10/14/19	
	London SM	5/17/19	5/16/20	Hutchinson	12/31/17	1/31/20			10/15/16	10/14/19	
	MetLife Pink	5/25/19	5/24/20	Kitchener	6/6/19						
	Nowak MA	5/17/19	5/16/20	London BFI Ode	6/25/18	6/25/19					
	Pensacola NAM	5/17/19	5/16/20</td								

Film	Theater	Open	Close	Film	Theater	Open	Close	Film	Theater	Open	Close
G3DNW	Raleigh	10/19/17	6/30/19	JTTSP	Washington NASM	3/6/15		SeaMonst	Dearborn THF	3/25/16	1/31/20
	Richmond SMV	5/1/13	6/30/19		Edmonton TWS	1/16/15			Hampton VASC	6/20/15	6/19/19
	Sacramento Imx	8/13/13	5/31/19		Memphis Pink	5/26/18	5/25/19		Hutchinson	5/20/16	6/21/19
	Saint Augustine	1/18/13	6/30/19		Speyer Dome	5/25/17	5/26/19		McMinnville	11/6/15	5/30/19
	San Diego RHF	10/12/12	6/30/19		Hartberg	9/7/18	9/6/19		Milwaukee	5/1/16	6/30/19
	Tallahassee CLC	1/18/13	6/30/19		Hutchinson	5/30/15	8/30/19		Regina	9/1/18	9/1/19
	Victoria DCI	4/5/13	6/30/19	L&C	Orlando SC	9/1/17	8/31/19		San Jose Tech	10/3/15	10/31/20
	Berlin CS	4/20/14	10/19/19		Columbus GA NIM		5/7/19		Tallahassee CLC	10/16/15	11/8/19
	Davenport Put	1/29/19	10/20/20		Davenport Put	4/26/20			Edmonton TWS	1/3/16	8/31/19
	Hastings	2/10/15	6/10/19		Raleigh	1/1/15	7/2/20		Philadelphia FI	1/1/19	6/30/20
	Katowice CC	6/19/14	9/30/19		Sacramento Imx	7/1/15	12/31/19		Victoria DCI	9/2/17	12/31/19
	Kodi CC	6/18/14	9/30/19		San Diego RHF		6/14/19		Chicago MSI	5/25/18	5/29/19
	Lodi CC	6/18/14	9/30/19	LastReef	Hartberg	9/7/18	9/6/19		Hong Kong SM	1/1/19	
	Melbourne MV	4/11/19	4/10/20		Hutchinson	5/30/15	8/30/19		Salt Lake City Clark	11/10/18	8/30/19
	Poznan CC	6/18/14	9/30/19		Orlando SC	9/1/17	8/31/19		Victoria DCI	9/1/18	
	Prague CC	5/22/14	12/31/19		Columbus GA NIM		5/7/19		Beijing 3D CSTM	4/1/19	3/31/20
	Salt Lake City Clark	1/11/18	10/31/19		Davenport Put	4/26/20			Hutchinson	9/8/17	3/31/20
	Warsaw CC	6/18/14	9/30/19		Raleigh	1/1/15	7/2/20		Minneapolis NMNMH	10/1/18	10/31/19
	Wrocław CC	10/4/17	9/30/19		Sacramento Imx	7/1/15	12/31/19		Singapore SC	6/1/18	6/1/19
GBR3D	Alexandria BA	1/30/19	1/29/20		San Jose Tech	6/8/16	6/20/19		Shanghai 3D STM	10/31/14	11/30/20
	Atlanta FMNH	12/15/18	12/14/19		Davenport Put	7/1/16	10/1/20		SupDogs	2/1/19	2/1/20
	Boston MOS	7/5/18	7/4/19		Hutchinson	5/1/15	7/19		Albuquerque NMNMH	4/9/19	
	Chattanooga TA	5/24/19	5/23/20		Lehi	4/10/15	7/30/19		Atlantic FMNH	5/1/19	
	Cleveland	8/1/18	7/31/19		McMinnville	4/10/15	5/30/19		Birmingham AL	3/15/19	
	Edmonton TWS	7/1/18	6/30/19		Washington NASM	4/10/15			Branson	3/15/19	
	Fort Lauderdale	10/18/17	10/4/19		McMinnville	3/23/22			Carnival Horizon	3/15/19	
	Hartberg	7/6/18	7/5/19		Albuquerque NMNMH	2/19/19	2/10/20		Carnival Vista	3/15/19	
	Houston MNS	3/8/19	3/8/20		Atlanta FMNH	2/8/18	2/8/20		Charlotte DP	3/15/19	
	Jersey City	11/23/18	11/22/19		Melbourne MV	1/30/17	1/28/20		Chicago NP AMC	3/15/19	
	Milwaukee	3/30/19	6/30/20		Oulu	4/1/19	9/30/19		Cleveland	6/15/19	
	Port of Spain	1/30/19	1/29/20		Memphis Pink	2/9/19	5/22/20		Columbus COSI	3/15/19	
	Saint Augustine	8/20/18	8/19/20		Mobile	1/25/19	1/31/20		Davenport Put	3/15/19	
	Salt Lake City Clark	7/21/18	7/20/19		Sudbury	9/7/17	10/31/19		Dearborn THF	3/15/19	
	San Diego RHF	7/5/18	7/5/19		Tallahassee CLC	5/1/19	11/1/20		Denver MNS	3/15/19	
	Atlanta FMNH	5/3/19	4/30/20		Pensacola NAM	11/8/96			Hong Kong SM	1/1/19	
	Beijing 3D CSTM	5/2/19	5/5/20		Speyer Dome		12/31/19		Indianapolis Imx	3/15/19	
	Fort Lauderdale	2/15/19	2/14/20		MOTUW		12/31/19		Jersey City	6/24/19	
GBRF	Hartberg	2/15/19	2/14/20		Bradford	4/12/14	6/30/19		Los Angeles CSC	3/15/19	
	Jersey City	3/15/19	3/14/20		Copenhagen TBP	6/19/14	6/18/19		Louisville KSC	3/15/19	
	Orlando SC	2/23/19	2/22/20		Hague	10/1/15	12/1/19		Lubbock SS	3/10/19	
	Raleigh	3/1/19	2/28/20		Mumbai Gha INOX	1/8/18	12/31/19		Melbourne MV	6/1/19	
	Regina	2/15/19	2/14/20		Parton	1/30/18	1/20/20		Mobile	5/4/19	
	Saint Augustine	2/15/19	2/14/20		Raleigh	11/1/15	10/17/19		Montreal SC	5/15/19	
	Seattle PSC 2	5/3/19	5/2/20		San Diego RHF	11/8/13	4/3/20		Norfolk MA	5/15/19	
	Singapore SC	3/16/19	3/15/20		Stockholm	9/18/15	9/1/19		Omaha Zoo	5/11/19	
	Sudbury	2/15/19	6/30/20		Tallahassee CLC	3/17	3/20		Orlando SC	4/1/19	
	Tijuana	2/22/19	2/22/20		MounQues	6/14/19	6/13/20		Peoria RM	3/15/19	
	Toronto OSC	2/15/19	2/14/20		Louisville KSC	10/1/18	9/30/19		Portland OMSI ET	3/15/19	
	Vancouver TWS	2/15/19	2/14/20		Mummies	Baton Rouge LASM	3/1/17	3/31/21	Quantico	5/10/19	
	Victoria DCI	2/15/19	2/14/20		Cincinnati MC	2/1/19	12/31/19	Raleigh	3/15/19		
	Grand Canyon DCI	11/1/19	12/19		Edmonton TWS	2/1/18	10/1/19	Sacramento Imx	3/15/19		
	Grand Rapids Cel	9/1/18	7/31/19		Jersey City	10/1/18	9/30/19	Saint Louis SC	3/15/19		
	Grand Rapids Cel	5/1/18	7/31/19		London BFI Ode	3/1/18	4/12/20	Salt Lake City Clark	3/30/19	3/29/20	
	Portage Cel	9/1/18	7/31/19		Memphis Pink	2/1/18	6/30/19	San Diego RHF	3/15/19		
GWS	Richmond SMV	6/1/16	7/31/19		Atlanta FMNH	5/1/17		Seaside PSC 2	3/22/19		
	Charlotte DP	11/1/17	10/1/20		Philadelphia FI	7/1/18		Shreveport	3/15/19		
	Des Moines	10/1/16	9/1/20		Carnival Horizon	4/1/18	10/5/19	Souix Falls	6/1/19		
	Edmonton TWS	10/1/16	6/4/20		Carnival Vista	11/4/16	6/4/19	Syracuse MOST	4/15/19		
	Mobile	10/1/18	10/31/20		Charlottesville	10/1/18	7/31/19	Tallahassee CLC	3/15/19		
	Seattle PSC 1	10/1/16	12/31/20		Grand Rapids Cel	10/1/18	7/31/19	Toronto OSC	4/12/19		
	Vancouver TWS	10/1/16	2/5/20		Hartberg	7/1/16	7/1/19	Vancouver TWS	5/1/19		
	Boston NEA	5/31/13	6/30/19		Hastings	6/9/16	7/1/19	Victoria DCI	5/1/19		
	Gatineau	10/7/16	3/31/20		Toronto MNS	7/1/18	12/31/19	Virginia Beach AMSC	5/15/19		
	Hutchinson	7/1/17	12/31/19		Lansing Cel	2/12/16	7/31/19	Washington NASM	3/15/19		
	Sacramento Imx	2/20/15	6/30/19		London BFI Ode	10/1/18	7/31/19	Chicago MSI	5/31/19		
	San Jose Tech	10/1/18	1/31/20		Mobile	5/26/18	5/25/19	West Palm Beach AMSC	6/30/19		
	St. Louis MOST	6/1/18	6/1/20		Souix Falls	12/1/16	12/1/19	Edmonton TWS	5/31/19		
HCBTD	San Simeon DCI	8/17/66			Phoenix ASC	4/2/18	8/19/18	Philadelphia CSC	11/15/17		
	Alamogordo	6/28/19	6/30/20		Sacramento Imx	2/19/18	3/25/20	Sioux Falls	6/30/18		
	Boston NEA	6/28/19	6/30/20		San Diego NHM	12/1/18	8/31/19	St. Louis SC	3/12/21		
	Chicago MSI	5/24/19	5/31/20		Shreveport	3/1/16	11/1/19	Tampa Bay AMSC	6/30/19		
	Lehi	6/28/19	6/30/20		Singapore SC	4/22/19	5/22/19	West Palm Beach AMSC	6/30/19		
	New Orleans	5/9/19	5/31/20		Simsbury	3/4/16	3/1/20	West Palm Beach AMSC	6/30/19		
	Grand Rapids Cel	5/2/19	7/31/19		Valencia Spn	2/12/16	7/31/19	West Palm Beach AMSC	6/30/19		
	Hampton VASC	9/7/18	12/31/19		London BFI Ode	10/1/18	7/31/19	West Palm Beach AMSC	6/30/19		
	Jersey City	7/1/18	7/31/19		Charlottesville	9/30/18	10/3/19	West Palm Beach AMSC	6/30/19		
	Lucerne STM	12/18/18	8/31/19		Chicago MSI	9/7/18	6/30/19	West Palm Beach AMSC	6/30/19		
	Atlanta FMNH	9/30/17	12/31/19		Edmonton TWS	8/15/18	6/30/19	West Palm Beach AMSC	6/30/19		
	Columbus COSI	9/22/18	9/30/19		London BFI Ode	8/15/18	6/15/19	West Palm Beach AMSC	6/30/19		
	Lehi	9/29/17	9/30/19		Lubbock SS	5/1/18	5/31/19	West Palm Beach AMSC	6/30/19		
	Phoenix ASC	10/1/18	10/31/19		Lucerne STM	6/1/18	6/30/19	West Palm Beach AMSC	6/30/19		
	Victoria DCI	11/6/18	11/30/19		Milwaukee	6/14/18	6/30/19	West Palm Beach AMSC	6/30/19		
	Edmonton TWS	12/26/13	6/30/19		Montgomery	2/15/18	2/15/19	West Palm Beach AMSC	6/30/19		
	Hague	6/30/19			Philadelphia FI	5/1/18	5/1/19	West Palm Beach AMSC	6/30/19		
Jerusale	Al Khobar	6/1/19	6/1/20		Philadelphia FI	9/28/18	9/30/19	West Palm Beach AMSC	6/30/19		
	Dayton	3/6/15	12/1/19		Phoenix ASC	5/4/18	5/31/19	West Palm Beach AMSC	6/30/19		
	Garza Garcia	12/4/18	8/4/19		Atlanta FMNH	1/31/19	2/1/20	West Palm Beach AMSC	6/30/19		
	Hampton VASC	2/21/15	2/20/20		Kuwait SCK	2/21/19	5/6/19	West Palm Beach AMSC	6/30/19		
	Edmonton TWS	12/26/13	6/30/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Pandas Penguins	8/3/15	8/30/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	PlanPowe	2/27/15	8/30/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	PTJH	10/29/15	6/9/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Pulse RobotsNG	4/1/15	11/30/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Ai Khobar	3/6/15	12/1/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Garza Garcia	12/4/18	8/4/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Hampton VASC	2/21/15	2/20/20		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Edmonton TWS	12/26/13	6/30/19		Philadelphia FI	10/23/17	6/20/19	West Palm Beach AMSC	6/30/19		
	Pandas Penguins	8/3/15	8/30/19								

Film	Theater	Open	Close	Film	Theater	Open	Close	Film	Theater	Open	Close	
Volcanoes	Albuquerque NMMNH Benton MOS Chattanooga TA Chicago MSI Cincinnati MC Davenport Put Denver MNS Edmonton TWS Erie Gatineau Houston MNS Kagoshima MSC Kuwait SCK Lehi Los Angeles CSC Melbourne MV Montreal SC Phoenix ASC Portland OMSI ET Richmond SMV Saint Louis SC	10/15/18 11/9/18 6/28/19 3/19 12/2/18 11/9/18 1/24/19 10/12/18 6/1/19 11/9/18 12/18 6/4/19 10/13/18 6/1/19 11/9/18 2/15/19 7/30/19 1/6/19 11/9/18 12/19 6/4/19 10/12/19 1/6/19 1/6/19 11/9/18 12/19 6/4/19 12/31/19 6/1/19 5/31/20 5/17/19	10/14/19		Salt Lake City Clark San Diego RHF Seattle PSC 2 Vancouver TWS Victoria DCI Charlotte DP Davenport Put Houston MNS Las Palmas Lucerne STM Melbourne MV Portland OMSI ET Richmond SMV Vancouver TWS	1/16/19 11/9/18 1/4/19 11/17/18 1/18/19 9/19/18 8/20/17 6/1/16 7/15/18 9/2/17 11/4/18 1/26/18 2/11/17 5/15/16 6/1/17 7/1/17 6/15/18 5/24/19 6/1/17 5/24/19 9/15/14 7/17/17 9/10/18 9/2/18 3/15/19 5/26/17 1/31/18 3/17/17 8/1/18 7/1/17 6/1/17 5/24/19 1/10/18 9/1/18 5/24/19 9/2/18 9/3/19 5/24/19 9/15/14 7/17/17 6/30/19 9/3/19 6/1/19 11/17/18 4/1/18 12/31/19	2/15/20		WTM WildAfri WildOcea WM WOTA	Quantico Singapore DC Houston MNS Bradford Edmonton TWS Eric Melbourne MV Peoria RM Portland OMSI ET Tallahassee CLC Yellowstone	7/31/17 4/1/18 5/31/19 9/6/15 5/1/15 9/15/16 6/30/18 9/22/17 4/19/16 5/1/14	8/31/19 5/31/19 9/30/19 5/31/19 12/15/19 9/30/19 6/30/19 9/2/18 1/31/20 7/31/19 12/31/20

May-June 2019 by Theater

Theater	Film	Open	Close	Theater	Film	Open	Close	Theater	Film	Open	Close
Aguascalientes	AMJ	4/5/19	8/5/19	DreamBig	3/17/17	3/31/20		Garden City	Dolphins	5/28/16	9/30/19
	DinoAliv	4/13/19	4/30/20	GBR3D	8/1/18	7/31/19		A11FSE	DreamBig	2/17/17	6/30/19
Al Khorbar	JTS	6/1/19	6/1/20	NPA	7/1/17	3/31/20		Galveston	NPA	2/12/16	5/31/19
	COBP	8/15/18	8/30/19	SupDogs	6/15/19			Grand Canyon DCI	SupDogs	3/15/19	
Alamogordo	AGCN	6/28/18	6/30/19	WW	6/1/18	6/1/19		Gatineau	GC	4/24/19	10/13/19
	HiddPac	6/28/19	6/30/20	A11FSE	5/24/19	9/2/19		Arabia	Arabia	4/24/19	3/30/20
Albuquerque NMMNH	AMJ	7/16/18	7/15/19	AmazAdve	1/10/18	6/30/19		BackWild	BackWild	6/1/18	3/31/20
	MA	2/11/19	2/10/20	Amazon	5/24/19	9/2/19		Cuba	Cuba	2/1/19	2/28/20
	SupDogs	4/19/19		AMU	5/25/18			D-Day	D-Day	9/1/15	3/31/20
	Volcanoes	10/15/18	10/14/19	Bugs	9/15/14	6/30/19		Dolphins	Dolphins	7/9/18	
Alexandria BA	GBR3D	1/30/19	1/29/20	FlyMons	7/17/17	7/30/19		Everest	Everest	7/30/20	
Athens Eug	OOPB	3/1/19	3/31/20	FOTB	9/1/14	6/30/19		FOTB	FOTB	10/5/12	6/30/19
Atlanta FMNH	A11FSE	6/1/19	5/30/20	IncrPred	9/22/18	9/30/19		GWS	GWS	10/7/16	3/31/20
	AsterME	1/11/18	1/10/20	OOBP	9/2/18	9/30/19		VanGogh	VanGogh	7/30/18	3/30/20
	EarthFl	6/21/18	6/30/19	SupDogs	3/15/19			Volcanoes	Volcanoes	6/1/19	1/6/20
	FOTB	11/2/18	5/2/19	ACGOTS	5/26/17	5/31/19		TTA	TTA	4/1/15	5/20/20
	GBR3D	12/5/18	12/14/19	D-Day	1/31/18	12/1/19		GC	GC	11/1/99	12/19
	GBRF	5/3/19	4/30/20	L&C	5/7/19			HumpbWha	HumpbWha	5/2/19	7/31/19
	IndrPred	9/30/17	12/31/19	NPA	4/1/16	5/9/19		TTA	TTA	6/2/18	7/31/19
	MA	2/28/18	2/8/20	MOTUW	6/19/18	6/18/19		BackWild	BackWild	5/1/19	5/1/20
	OOPB	8/3/18	8/30/19	SOE	7/15/18	7/15/19		TTA	TTA	5/1/19	5/1/20
	Penguins	1/31/19	2/1/20	TTS	4/14/19	4/13/20		AMU	AMU	4/16/19	4/15/20
	SupDogs	5/15/19		ACGOTS	6/17/16			BackWild	BackWild	4/3/19	3/31/20
	TOTIA	6/15/17	6/30/19	FightPil	5/12/12			A11FSE	A11FSE	5/21/19	11/21/19
Atlantic City	SupDogs	3/15/19		Bugs	10/1/12	4/28/20		Amazon	Amazon	5/21/19	11/21/19
Austin Reg	AMJ	3/1/19	6/1/20	FlyMons	10/15/16	10/14/19		AMJ	AMJ	7/3/18	7/2/19
Austin TSHM	AmazAdve	9/1/18	8/15/19	FOTB	2/15/13	6/30/19		BackWild	BackWild	2/12/18	2/11/20
Baltimore MSC	DreamBig	10/1/17	9/1/19	G3DNW	1/29/19	10/20/20		FON	FON	10/4/12	10/3/20
	BackWild	3/1/19	3/1/21	L&C	4/26/20			JTM	JTM	3/3/14	12/31/19
	DreamBig	2/17/17	6/30/19	LastReef	7/1/15	6/30/19		MOTUW	MOTUW	10/1/15	12/19
	ExtrWeat	3/1/19	6/30/21	LITAOA	7/1/18	10/1/20		OOPB	OOPB	7/13/18	7/31/19
	HumpbWha	7/1/18	7/12/19	SupDogs	3/15/19			PTJH	PTJH	6/9/15	12/19
Baton Rouge LASM	Mummies	3/1/17	3/31/21	TA	7/1/14	6/30/19		SupDogs	SupDogs	6/18/19	
Beijing 3D CSTM	GBRF	5/2/19	5/25/20	TOTIA	2/1/15	6/30/19		A11FSE	A11FSE	6/15/19	6/14/20
Berlin CS	SpaceNex	4/1/19	3/31/20	Volcanoes	11/9/18	11/8/19		ACGOTS	ACGOTS	11/10/19	11/9/19
Birmingham AL	G3DNW	4/20/14	10/19/19	WildAfri	8/20/17	9/30/19		AMJ	AMJ	10/1/18	9/30/19
	A11FSE	5/19/19	5/18/20	ACGOTS	6/17/16	12/31/19		D-Day	D-Day	10/17/18	10/17/19
	Amazon	5/19/19	5/18/20	Amazon	5/25/19	5/24/20		Huricin	Huricin	9/7/18	12/31/19
	OOPB	9/30/18	9/30/19	DreamBig	2/17/17	2/18/20		JTS	JTS	6/15/17	6/14/19
Bogota Mal	RobotsNG	6/1/19	5/31/20	RobotsNG	3/25/16	1/31/20		RobotsNG	RobotsNG	6/2/15	6/19/19
Boston MOS	Cuba	2/15/19	2/29/20	DreamBig	5/17/19	5/16/20		SupDogs	SupDogs	5/19/19	5/21/20
	GBR3D	7/5/18	7/4/19	NPA	6/17/18	2/1/19		TTA	TTA	3/20/19	3/11/20
	HumpbWha	2/3/15	12/31/19	BackWild	8/1/18	7/31/19		ExpChesa	ExpChesa	3/20/19	
Boston NEA	GIVS	5/31/13	6/30/19	D-Day	2/27/17	5/31/19		FOTB	FOTB	2/2/14	6/30/19
	HiddPac	6/28/19	6/30/20	DreamBig	2/17/17	2/18/20		GBR3D	GBR3D	7/6/18	7/5/19
Bradford	A11FSE	5/17/19	5/16/20	RobotsNG	3/25/16	1/31/20		GBRF	GBRF	2/15/19	2/14/20
	Amazon	5/17/19	5/16/20	SupDogs	3/15/19			NPA	NPA	7/1/16	7/1/17
Carnival Vista	DreamBig	1/1/16	6/4/19	SupDogs	5/17/19	5/16/20		TinyGian	TinyGian	2/1/18	3/31/21
	SupDogs	3/1/16		Amazon	5/17/19	9/14/19		Kenya	Kenya	9/7/18	9/6/19
Chantilly	DreamBig	2/17/17	2/16/20	Bugs	6/30/18	6/30/19		NPA	NPA	6/1/19	6/1/21
	FightPil	12/1/04		Cuba	2/1/19	2/28/20		DreamBig	DreamBig	6/1/18	6/2/19
Charleston CCAS	LITAOA	5/1/15		D-Day	3/1/18	12/31/19		JTM	JTM	3/17/13	6/30/19
Charlotte DP	PTJH	1/1/19	1/1/21	DreamBig	3/25/17	2/18/20		G3DNW	G3DNW	2/10/15	6/10/19
	AmazAdve	5/1/17	6/30/19	DSC	9/14/18	9/23/19		NPA	NPA	6/9/16	7/1/19
	BackWild	11/24/18	11/23/19	ExtrWeat	6/2/17	6/1/19		SupDogs	SupDogs	3/15/19	
	DreamBig	8/26/17	12/31/19	FOTB	12/26/13	6/30/19		TurOdys	TurOdys	9/13/18	5/30/19
	FlyMons	5/26/18	12/31/19	GBR3D	7/1/18	6/30/19		SOE	SOE	1/1/19	
	GlobSoun	11/1/18	10/1/20	GlobSoun	10/1/16	6/4/20		A11FSE	A11FSE	5/17/19	9/3/19
	OOPB	6/1/18	6/30/19	Jerusale	12/26/13	6/30/19		AmazAdve	AmazAdve	4/2/17	12/31/19
	SupDogs	3/15/19		HumpbWha	12/1/13	6/30/19		Amazon	Amazon	5/17/19	9/3/19
	WildAfri	9/19/18	9/30/19	D-Day	3/1/18	12/31/19		BackWild	BackWild	2/10/15	9/15/19
Chattanooga TA	A11FSE	6/14/19	6/12/20	DreamBig	3/25/17	2/18/20		FOTB	FOTB	3/17/13	6/30/19
	AMJ	6/2/18	6/2/19	DSC	9/14/18	9/23/19		NPA	NPA	7/1/16	7/1/17
	D-Day	6/6/19	6/9/19	ExtrWeat	6/2/17	6/1/19		Hastings	Hastings	6/1/16	6/2/19
	GBR3D	5/24/19	5/23/20	FOTB	12/26/13	6/30/19		DreamBig	DreamBig	10/19/17	10/11/19
	Volcanoes	6/28/18	12/28/19	GBRF	7/1/18	6/30/19		JTC	JTC	3/17/13	6/30/19
Chicago MSI	AmazAdve	5/26/17	6/30/19	GlobSoun	1/3/16	8/31/19		G3DNW	G3DNW	2/10/15	6/10/19
	Cuba	3/1/19	3/31/20	SupDogs	3/15/19			NPA	NPA	6/9/16	7/1/19
	HiddPac	5/24/19	5/31/20	TurOdys	4/27/19	10/30/19		SupDogs	SupDogs	3/15/19	
	OOPB	3/16/18	5/24/19	Volcanoes	2/15/19	7/30/19		TurOdys	TurOdys	9/13/18	
	SOE	5/25/18	5/25/19	WildAfri	5/31/19			SOE	SOE	1/1/19	
	TA	5/31/18	5/31/19	AmazAdve	6/30/19			A11FSE	A11FSE	5/17/19	
	Volcanoes	3/19		BackWild	8/4/18	6/30/19		Amazon	Amazon	5/17/19	
Chicago NP AMC	SupDogs	3/15/19		TurOdys	4/27/19	10/30/19		BackWild	BackWild	2/16/19	9/15/19
Cincinnati MC	HumpbWha	2/1/19	12/31/19	Volcanoes	10/12/18	10/11/19		DinoAliv	DinoAliv	7/1/17	6/30/19
	NPA	1/1/19	2/1/21	WildAfri	5/31/19			DreamBig	DreamBig	2/17/17	12/31/19
	Volcanoes	12/21/18		GBR3D	10/4/18	10/4/19		GBRF	GBRF	3/6/19	3/8/20
Cleveland	A11FSE	5/18/19	5/17/20	GBRF	2/1/19	2/14/20		NPA	NPA	4/26/19	12/31/19
	AmazAdve	1/9/18	6/30/19	SupDogs	4/19/19			Volcanoes	Volcanoes	11/9/18	
	Amazon	5/18/19	5/17/20	WildAfri	5/17/19	5/16/20		WildAfri	WildAfri	6/1/16	6/30/19
	AMJ	3/23/18	3/31/20	Amazon	5/17/19	5/30/19		WTR3D	WTR		

Theater	Film	Open	Close	Theater	Film	Open	Close	Theater	Film	Open	Close
Hutchinson	A11FSE	5/17/19	5/16/20	MOC	2/9/19	5/22/20		Richmond SMV	GBRF	2/15/19	2/14/20
	A11FSE	5/19/19	5/18/20	TinyGian	11/17/18	5/22/20			RobotsNG	9/1/18	9/1/19
	ACGTS	5/20/17	1/20/19	NPA	3/27/18	5/23/19			FOTB	5/17/19	6/30/19
	AirRacer	1/19/18	1/31/20	ExtrWeat	4/22/18	8/18/19			GOA	6/1/18	7/31/19
	Amazon	5/19/19	5/18/20	GBR3D	3/30/19	6/30/20			HumpbWha	3/14/15	7/31/19
	Cuba	2/15/19	2/28/20	MounQues	10/1/18	9/30/19			OOPB	6/1/18	6/30/19
	D-Day	12/31/17	1/31/20	OOBP	6/14/18	6/30/19			Volcanoes	6/1/19	5/31/20
	GWS	7/1/17	12/31/19	Penguins	10/23/17	6/20/19			WildAfri	2/1/17	
	Kenya	5/30/15	8/30/19	RobotsNG	5/1/16	6/30/19			AmazAdv	9/8/17	6/30/19
	LITAOA	5/1/15	7/19	TOTIA	6/14/18	6/30/19			ExtrWeat	2/24/17	
	RobotsNG	5/20/16	6/12/19	GlobSoun	10/18/17	10/31/20			FOTB	8/13/13	5/31/19
	SpaceNex	9/8/17	3/31/20	MOC	1/25/19	1/31/20			GWS	2/20/15	6/30/19
	SpaceJunk	10/31/14	11/30/20	NPA	5/26/18	5/25/19			HumpbWha	8/19/16	10/24/19
	TOTIA	7/1/17	12/31/19	SupDogs	5/4/19				Jerusale	9/15/14	10/23/19
Indianapolis Imx	AmazAdv	9/8/17	6/7/19	AMJ	3/15/18	4/15/20			L&C	7/1/15	12/31/19
	AMJ	6/8/18	6/7/19	DreamBig	2/2/18	4/15/20			LastReef	5/20/16	6/30/19
	DreamBig	1/17/19	1/16/20	AMJ	5/18/18	5/17/19			Mummies	1/1/17	3/25/20
	HumpbWha	8/17/16	6/5/19	OOBP	6/1/18	6/30/19			NPA	2/19/16	
	JTS	8/31/18	8/30/19	SupDogs	5/15/19				SupDogs	3/15/19	
	TurOdy	3/15/19		Volcanoes	2/14/19	8/14/19			TLR	5/20/16	6/30/19
Jersey City	TurOdy	5/17/19	11/16/19	AMJ	4/15/18	4/16/20			TurOdy	9/21/18	6/30/19
	BackWild	8/4/18	8/3/19	DreamBig	9/10/17	6/1/19			AMJ	6/1/18	5/30/19
	DreamBig	2/17/17	12/31/19	NPA	9/17/16	12/1/19			DreamBig	2/17/17	6/30/20
	GBR3D	11/23/18	11/22/19	TTA	11/1/16	12/1/19			ExtrWeat	10/15/16	10/16/20
	GBRF	3/15/19	3/14/20	MOTUW	1/1/18	12/31/19			FOTB	1/18/13	6/30/19
	Jerusal	9/1/18	8/31/20	Dolphins	3/1/19	12/1/19			GBRF	8/20/18	8/19/20
	NPA	2/12/16	6/24/19	ND					GBRF	2/15/19	2/14/20
	OOBP	6/25/18	6/30/19	HiddPac	5/9/19	5/31/20			L&C	6/14/19	
Kagoshima MSC	SupDogs	6/24/19		HOTB	9/15/15	12/31/19			AOTE	4/1/18	11/30/19
Kansas City Sci	Volcanoes	12/18	12/19	TOTIA	7/1/18	6/30/19			WOTA	4/1/18	11/30/19
	DinoAliv	7/3/19	7/31/19	WildOcea	7/1/17	6/30/19			AGWN	9/13/18	9/13/19
	ExtrWeat	10/15/16	10/14/19	Niagara	7/1/86				Cuba	3/1/19	3/1/20
Kapurthala	AMJ	6/15/18	6/14/20	Niagara	5/1/07				A11FSE	6/22/19	6/21/20
	Everest	6/15/18	6/14/20	New Delhi ICC					ExtWeat	10/24/16	12/31/19
Katowice CC	AfricAdv	9/30/19		New Orleans					FON	11/14	4/20
	G3DNW	6/18/14	9/30/19	HiddPac	5/9/19	5/31/20			SupDogs	3/15/19	
	TurtTale	9/30/19		AMJ	5/17/19	5/16/20			Volcanoes	5/17/19	
Keeling NMNST	HumpbWha	7/1/18	6/30/19	BackWild	3/24/18	6/30/19			Amazon	5/17/19	8/4/19
	FlyMons	6/4/16	6/3/21	OOBP	10/5/18	10/31/19			Cuba	3/1/19	3/1/20
	Killeen	D-Day	6/6/19	SupDogs	3/15/19				A11FSE	5/17/19	8/4/19
	FlyMons	9/15/17	9/15/20	AMJ	2/24/18	6/30/20			ExtWeat	10/15/16	
Kolkata SC	AsterME	1/11/19	12/31/20	DreamBig	2/17/17	11/9/19			VO	10/15/16	10/30/19
Krakow CC	Dolphins	3/1/19	12/1/19	FMFTM	5/16/19	12/31/19			WOTA	1/27/18	12/31/19
	AfricAdv	9/30/19		GBRF	2/23/19	2/22/20			AGWN	1/1/18	1/1/19
	G3DNW	6/18/14	9/30/19	AMJ	2/26/19	2/27/20			SupDogs	3/30/19	3/29/20
KSC 1	TJS	2/27/15		D-Day	7/1/18	6/30/19			Volcanoes	1/16/19	2/15/20
KSC 2	TTS	5/1/19	4/30/20	FOTB	4/21/18	6/30/20			Amazon	5/17/19	8/4/19
Kuwait SCK	A11FSE	5/17/19	12/31/19	SupDogs	5/1/19				Cuba	3/1/19	3/1/20
	AmazAdv	6/14/18	12/31/19	AMJ	2/24/18	6/30/20			A11FSE	6/22/19	6/21/20
	FMFTM	2/21/19	5/6/19	DreamBig	2/17/17	11/9/19			ExtWeat	10/24/16	11/19/19
	OOBP	8/20/18	8/31/19	FMFTM	5/16/19	12/31/19			VO	11/13/18	9/13/19
Lansing Cel	Penguins	2/21/19	5/6/19	GBRF	2/23/19	2/22/20			WOTA	1/27/18	11/13/19
	Volcanoes	2/21/19	5/6/19	AMJ	2/26/19	2/27/20			AGWN	1/1/18	1/1/19
	6/4/19	12/31/19	DreamBig	2/27/19	2/27/20			SupDogs	3/30/19	3/29/20	
	GCA	5/1/19	7/31/19	FOTB	4/1/18	6/30/20			Volcanoes	1/16/19	2/15/20
	HidUniv	7/1/18	7/31/19	SupDogs	3/10/18				Amazon	5/17/19	8/4/19
	WildAfri	7/15/18	7/31/19	AMJ	2/16/18	2/17/20			Cuba	3/1/19	3/1/20
Las Palmas	BackWild	5/24/18	5/24/20	D-Day	4/2/18	2/28/20			A11FSE	5/17/19	5/16/20
Lehi	FOTB	1/19/19	1/19/20	FOTB	4/1/16	6/30/19			AMJ	2/17/18	11/19/19
	IncPred	9/29/17	9/30/19	SupDogs	3/30/19				DreamBig	2/17/17	11/19/19
	LITAOA	4/10/15	7/30/19	TinyGian	6/30/18	6/30/20			ExtrWeat	10/15/16	10/30/19
	TurtOdy	7/13/18	7/12/19	AMJ	5/17/19	5/16/20			GWS	10/31/18	1/31/20
	Volcanoes	10/13/18	10/12/19	OOBP	9/28/18	9/30/19			Jerusale	3/15/15	6/20/19
Leon Exp	FlyMons	3/1/19	11/30/19	SupDogs	3/30/19				L&C	6/8/16	6/20/19
	HumpbWha	12/1/18	5/31/19	AMJ	5/17/19	5/16/20			NPA	2/12/16	11/19/19
Lodz CC	AfricAdv	9/30/19		OOBP	5/1/18	5/1/19			RobotsNG	10/3/15	10/31/20
	G3DNW	6/18/14	9/30/19	SupDogs	2/1/18	2/2/19			SupDogs	3/22/19	
	TurtTale	9/30/19		AMMM	9/1/18	2/6/20			HOTB	8/17/18	
London BFI Ode	AMMM	9/1/18	2/6/20	AMJ	6/25/18	6/25/19			GlobSoun	10/1/16	12/31/20
	D-Day	6/25/18		NPA	6/12/16	7/1/19			A11FSE	5/31/19	7/18/20
	Jerusale	1/1/14	12/31/19	OOBP	9/12/16	6/30/19			AmazAdv	11/10/17	
London SM	A11FSE	5/17/19	5/16/20	SupDogs	3/10/18				AMJ	9/7/18	9/6/19
	Amazon	5/17/19	5/16/20	AMJ	5/25/19				D-Day	3/29/14	6/30/19
	DreamBig	9/4/17	8/31/19	OOBP	5/4/18	5/31/19			DreamBig	2/17/17	6/30/19
Los Angeles CSC	JTS	10/29/15	6/9/19	TOTIA	12/1/18	12/31/19			GBRF	5/3/19	5/2/20
	SupDogs	3/15/19		Volcanoes	9/16/19	7/15/20			SupDogs	3/15/19	
Louisville KSC	Volcanoes	1/6/19	7/15/19	AMJ	5/17/19	5/16/20			VWTM	4/1/19	8/31/19
	DreamBig	2/17/17		IncrPred	10/19/18	10/31/19			AMJ	4/22/19	5/22/19
	FON	6/18/15	7/2/20	Mummies	2/6/19	2/28/20			GBRF	3/16/19	3/15/20
	FOTB	9/30/12	6/30/19	AMJ	5/17/19	5/16/20			NPA	4/22/19	5/22/19
	Jerusale	1/20/14	7/20/20	OOBP	5/4/18	5/31/19			SpaceNx	6/1/18	6/1/19
	LastReef	2/8/14	6/30/19	TOTIA	12/1/18	12/31/19			A11FSE	5/17/19	5/16/20
Lubbock SS	AMJ	7/6/18	7/6/19	Volcanoes	2/22/19	7/20/19			Amazon	5/17/19	5/16/20
	BackWild	11/9/18	5/30/19	AMJ	2/12/16	12/31/19			Cuba	3/1/19	3/1/20
	OOBP	5/1/18	5/31/19	OOBP	2/12/16	1/31/20			A11FSE	5/17/19	5/16/20
	SupDogs	3/10/19		SupDogs	2/1/18	2/2/19			ExtWeat	10/15/16	6/30/19
Lucerne STM	SupDogs	3/15/19		AMJ	2/1/18	2/2/19			VO	12/2/17	6/30/19
	TinyGian	9/21/17	9/30/19	AMJ	2/1/18	2/2/19			WOTA	1/27/18	12/31/19
	TOTIA	9/22/17	9/30/19	OOBP	1/26/18	1/31/20			AGWN	1/1/19	1/1/20
	TurtTale	5/12/18	12/31/19	OOBP	1/26/18	1/31/20			AmazAdv	8/1/18	8/1/19
	Volcanoes	3/21/19	3/20/20	SupDogs	3/15/19				SupDogs	3/15/19	
	WildAfri	1/4/18	2/1/21	WTM	7/31/17				Volcanoes	1/1/18	
McMinnville	WildAfri	9/21/17	9/30/19	AMJ	9/1/18	8/31/19			AMJ	2/1/18	2/1/19
	DSC	6/16/16		BackWild	6/4/18	6/3/19			OOBP	3/9/19	6/30/20
	FightPil	3/23/12		DreamBig	2/1/18	2/2/19			SupDogs	3/11/15	
	LITAOA	4/10/15	5/30/19	OOBP	1/26/18	1/31/20			TinyGian	6/24/16	5/31/19
	LOF	3/23/12		SupDogs	3/15/19				TurtOdy	12/7/18	12/6/19
	RobotsNG	11/6/15	5/30/19	AMJ	1/25/19	5/16/20			AMazAdv	2/16/19	2/15/20
	SpaceNex	10/1/18	10/31/19	OOBP	1/26/18	1/31/20			SupDogs	4/15/19	
	TTS	1/1/19	12/31/19	WTM	1/26/18	1/31/20			WOTA	1/27/18	
Melbourne MV	AmazAdv	9/15/17	9/13/19	AMJ	1/25/19	5/16/20			AGWN	1/1/19	
	AMMM	7/11/16		OOBP	1/26/18	1/31/20			SupDogs	4/18/17	
	D-Day	5/1/19	7/31/19	OOBP	1/26/18	1/31/20			Volcanoes	1/1/19	
	ExtrWeat	4/1/19	3/31/20	OOBP	1/26/18	1/31/20			AMJ	2/16/18	

Theater	Film	Open	Close	Theater	Film	Open	Close	Theater	Film	Open	Close
	ExtrWeat	5/19/17	5/1/20		SupDogs	4/12/19			OOBP	7/1/18	7/31/19
	FOTB	1/18/13	6/30/19	Toulouse CDE	A11FSE	6/1/19	12/31/19		SFLIS	9/22/17	12/31/19
	HidUniv	2/1/19	2/28/20	Valencia Spn	AM	7/1/18			SOL	9/1/18	
	HumpbWha	1/1/19	2/28/20		BackWild	4/1/19	6/30/19		SDogs	9/1/19	
	JTS	6/23/18	6/21/20		DreamBig	4/1/18	6/30/19		Volcanoes	1/18/18	7/18/19
	MOC	5/1/19	11/1/20		NPA	10/7/16	6/30/19		BackWild	6/30/19	12/31/19
	MOTUW	3/17	3/20	Vancouver TWS	PlanPowe	1/7/19	6/30/20		OOBP	1/1/19	1/31/20
	OOBP	6/7/19	12/31/20		AmazAdve	12/2/17	6/30/19		SupDogs	5/15/19	
	RobotsNG	10/1/16	11/8/19		D-Day	11/7/15	11/13/19		TurtOdyns	6/30/18	9/30/19
	SupDogs	3/15/19			CBRF	2/15/19	2/14/20		AfricAdv	9/30/19	
	TinyGian	1/6/16	7/31/19		GlobSoun	10/1/16	2/5/20		G3DNW	6/1/18	9/30/19
	TTA	2/1/19	2/28/20		Mummies	7/1/17	6/30/19		TurtTale	5/26/17	5/25/20
	WildAfri	5/15/16	6/30/19		NPA	2/12/16	6/30/19		D-Day	5/23/17	5/22/20
	WWDP3D	4/19/16	7/31/19		Pulse	7/1/17	6/30/19		DreamBig	2/17/17	2/16/20
Thessaloniki SCTM	DreamBig	10/28/17	10/2/19		SupDogs	5/1/19			JTS	3/6/15	
	JTS	12/14/18	1/13/20		Volcanoes	11/1/17	18		LITAOA	4/10/15	
Tijuana	AGWN	4/12/19	4/11/20		WOTA	7/1/17	6/30/19		SDogs	3/15/19	
	Cuba	10/1/18	10/1/19	Vantaa	PTJH	1/27/17	1/26/20		AfricAdv	9/30/19	
	ExtrWeat	7/28/17	8/1/19	Victoria DCI	ACGOTS	5/2/19	5/31/20		G3DNW	10/4/17	9/30/19
	GBRF	2/22/19	2/22/20		AmazAdve	4/14/17	6/30/19		TurtTale	5/17/19	5/16/20
Toronto OP	ACGOTS	6/1/18	6/1/20		Cuba	3/29/19	3/31/20		Yellowstone	5/1/14	12/31/20
Toronto OSC	A11FSE	5/17/19	11/16/20		D-Day	7/1/17	7/1/19				
	AmazAdve	10/6/17	6/30/20		DreamBig	3/17/17	12/31/19				
	Amazon	5/17/19	11/16/20		FOTB	4/5/13	6/30/19				
	Amazon	10/15/18	10/15/19		GBRF	2/15/19	2/14/20				
	OOBP	6/15/18	6/30/19		IncrPred	11/16/18	11/30/19				

Key to Film Abbreviations

Film	Title	Year	Dist	Film	Title	Year	Dist
A11FSE	Apollo 11: First Steps Edition	2019	MFF	Niagara	Niagara: Miracles, Myths, and Magic	1987	DCI
ACGOTS	Aircraft Carrier: Guardian of the Seas	2016	3D	NPA	National Parks Adventure	2016	MFF
AfricAdv	African Adventure 3D	2007	3D	OOBP	Oceans: Our Blue Planet	2018	3D
AGWN	Australia's Great Wild North	2018	K2	Pandas	Pandas	2018	IMAX
AirRacer	Air Racers 3D: Forces of Flight	2012	3D	Penguins	Penguins 3D	2013	nWP
AmazAdve	Amazon Adventure	2017	3D	PlanPowe	Planet Power	2018	nWP
Amazon	Amazon	1997	MFF	PTJH	Pandas: The Journey Home	2014	CPD
AMJ	America's Musical Journey	2018	3D	Pulse	Pulse: A Stomp Odyssey	2002	GSF
AMMM	Amazing Mighty Micro Monsters 3D	2016	3D	RobotsNG	Robots	2015	CPD
Animalop	Animalopolis	2008	3D	SeaMonst	Sea Monsters: A Prehistoric Adventure	2007	CPD
AOTE	Antarctica 3D: On the Edge	2014	3D	SFLIS	Search for Life In Space, The	2016	MFF
Arabia	Arabia	2010	3D	SOE	Story of Earth, The	2018	DMD
AsterME	Asteroid: Mission Extreme	2016	3D	SpaceNex	Space Next 3D	2015	B&D
BackWild	Backyard Wilderness	2018	3D	SpacJunk	Space Junk	2012	K2
Bugs	Bugs!	2003	3D	SupDogs	Superpower Dogs	2019	IMAX
CRA	Coral Reef Adventure	2003	MFF	TA	Tornado Alley	2011	GSF
Cuba	Cuba	2019	3D	TinyGian	Tiny Giants 3D	2014	GSF
D-Day	D-Day: Normandy 1944	2014	3D	TOTIA	Titans of the Ice Age	2013	GSF
DinoAliv	Dinosaurs Alive	2007	3D	TTA	To the Arctic	2012	MFF
Dolphins	Dolphins	2000	MFF	TTS	Touch the Stars	2019	B&D
DreamBig	Dream Big: Engineering Our World	2017	3D	TurtOdyns	Turtle Odyssey	2018	SKF
DSC	Deepsea Challenge 3D	2015	3D	TurtTale	Turtle's Tale: Escape from Paradise, A	2013	nWP
EarthFli	Earthflight	2017	3D	VanGogh	Van Gogh: Brush with Genius	2009	MFF
Everest	Everest	1998	MFF	Vikings	Vikings	2004	GSF
ExpChesa	Expedition Chesapeake	2019	B&D	Volcanoes	Volcanoes: The Fires of Creation	2018	SKF
ExtrWeat	Extreme Weather	2016	3D	WildAfri	Wild Africa 3D	2015	GSF
FightPil	Fighter Pilot: Operation Red Flag	2004	3D	WildOcea	Wild Ocean	2008	GSF
FlyMons	Flying Monsters 3D	2011	3D	WM	Watermelon Magic	2013	B&D
FMTTM	Fly Me to the Moon	2008	nWP	WOTA	Wonders of the Arctic	2014	GSF
FON	Forces of Nature	2004	CPD	WTM	We, The Marines	2017	MFF
FOTB	Flight of the Butterflies	2012	3D	WTTR3D	Waking the T-Rex: The Story of Sue 3D	2010	GSF
G3DNW	Galapagos 3D: Nature's Wonderland	2014	3D	WWDP3D	Walking With Dinosaurs: Prehistoric Planet 3D	2014	GSF
GBR3D	Great Barrier Reef	2018	3D	Yell	Yellowstone	1994	GSF
GBRF	Great Bear Rainforest	2019	3D				
GC	Grand Canyon: The Hidden Secrets	1985	DCI				
GCA	Grand Canyon Adventure: River at Risk	2008	MFF				
GlobSoun	Global Soundscapes	2016	FIC				
GWS	Great White Shark	2013	GSF				
HCBTD	Hearst Castle: Building the Dream	1996	DCI				
HiddPac	Hidden Pacific	2019	3D				
HidUniv	Hidden Universe	2013	MFF				
HOTB	Hurricane on the Bayou	2006	MFF				
HumpbWha	Humpback Whales	2015	3D				
Hurican	Hurricane	2017	nWP				
IncrPred	Incredible Predators	2016	3D				
Jerusale	Jerusalem	2013	CPD				
JMCSo	Jean-Michel Cousteau's Secret Ocean	2015	K2				
JTM	Journey to Mecca	2009	CPD				
JTS	Journey to Space	2015	K2				
JTSP	Journey to the South Pacific	2013	MFF				
Kenya	Kenya 3D: Animal Kingdom	2013	K2				
L&C	Lewis & Clark: Great Journey West	2002	CPD				
LastReef	Last Reef, The	2012	3D				
LITAOA	Living in the Age of Airplanes	2015	CPD				
LOF	Legends of Flight	2010	K2				
MA	Museum Alive 3D	2016	nWP				
MOC	Mysteries of China	2016	GSF				
MOF	Magic of Flight, The	1997	MFF				
MOTUW	Mysteries of the Unseen World	2013	3D				
MounQues	Mountain Quest	2018	K2				
Mummies	Mummies: Secrets of the Pharaohs	2007	GSF				
ND	Neelkanth Darshan	2005	unk				

May-June 2019 Bookings Count

#	Film	#	Film	#	Film	#	Film
53	SupDogs	9	RobotsNG	4	GCA	2	SpacJunk
38	A11FSE	9	WildAfri	4	LastReef	2	TLR
35	DreamBig	8	AGWN	4	MA	2	WM
33	AMJ	8	TOTIA	4	MOC	2	WTM
31	NPA	7	L&C	4	PTJH	1	AirRacer
30	OOBP	7	Mummies	4	SpaceNex	1	Animalop
28	BackWild	7	WWDP3D	4	TTS	1	Arabia
26	Volcanoes	6	AfricAdv	4	WOTA	1	CRA
24	AmazAdve	6	FlyMons	3	AOTE	1	EarthFli
22	Amazon	6	FON	3	AsterME	1	ExpChesa
22	D-Day	6	GlobSoun	3	FMTTM	1	GC
19	ExtrWeat	6	GWS	3	JTSP	1	HCBTD
18	FOTB	6	HidUniv	3	Kenya	1	HOTB
17	HumpbWha	6	LITAOA	3	Penguins	1	JMCSo
16	GBRF	6	TurtTale	3	PlanPowe	1	LOF
15	GBR3D	5	DinoAliv	3	SFLIS	1	ND
14	JTS	5	Dolphins	2	AMMM	1	Pandas
12	Cuba	5	HiddPac	2	DSC	1	Pulse
12	G3DNW	5	IncrPred	2	Everest	1	Seamonst
11	TinyGian	5	SOE	2	Hurican	1	VanGogh
11	TurtOdyns	5	TA	2	JTM	1	Vikings
10	Jerusale	5	TTA	2	MOF	1	WildOcea
9	ACGOTS	4	Bugs	2	MounQues	1	WTTR3D
9	MOTUW	4	FightPil	2	Niagara	1	Yell

Directory of Organizations Mentioned in this Issue of LF Examiner

Distributors' abbreviations are listed in **bold**.

<p>3D Entertainment Distribution Ltd. 3DED Ibx House 61-65 Baker Street Weybridge, Surrey KT13 8AH UK Tel: +44 20 7681-2357 Fax: +44 20 7681-2357 www.3defilms.com</p> <p>Academy of Motion Picture Arts and Sciences Margaret Herrick Library 8949 Wilshire Boulevard Beverly Hills, CA 90211-1972 USA Tel: 310-247-3000 https://www.oscars.org/</p> <p>Amazon Studios Santa Monica, CA USA https://studios.amazon.com/</p> <p>American Society of Cinematographers PO BOX 2230 Hollywood, CA 90078 USA Tel: 323-969-4333 Fax: 323-882-6391 www.cinematographer.com</p> <p>Archipelago Films 2 Jackson Street Pleasantville, NY 10570 USA Tel: 914-862-4202 www.archipelagofilms.com</p> <p>Atlantic Productions Brook Green House 4 Rowan Road, Hammersmith London, W6 7DU UK Tel: +44 20 8735 9300 Fax: +44 20 8735 9333 http://atlanticproductions.tv/</p> <p>BAPS Shree Swaminarayan Mandir Swaminarayan Akshardham, N.H. 24 Near Noida Mor New Delhi, 110 092 INDIA Tel: +91-11- 2201 6688 Fax: +91-11-2201 5757 www.akshardham.com</p> <p>Barco NV Noordlaan 5 - Industriezone Kuurne, B-8520 BELGIUM Tel: +32 56 36 8211 Fax: +32 56 36 8486 https://www.barco.com/en/</p> <p>BBC Earth Television Centre, 101 Wood Lane London, W127FA UK https://www.bbcearth.com/</p>	<p>Biblioteca Alexandrina 116, El Horreya Avenue, Bab Sharqi Alexandria, EGYPT Tel: +20-3-48 76 024 Fax: +20-3-48 76 001 https://www.bibalex.org/psc/en/home/index.aspx</p> <p>BIG & Digital B&D 8565 S. Eastern Avenue, Suite 158 Las Vegas, NV 89123 USA Tel: 502-212-1559 www.biganddigital.com/</p> <p>Blue Sky Aerial & Specialist Filming Tärnösund, Tidö Västeras, SE-725 92 SWE-DEN Tel: +46-21-189597 Fax: +46-21-126810 https://www.bluesky.se/</p> <p>Camera Lucida Productions 89, rue Oberkampf Paris, 75011 FRANCE Tel: 33-1-49 29 51 90 www.cameralucida.fr/</p> <p>Carnival Cruise Line 3655 NW 87th Avenue Miami, FL 33178 USA Tel: 305-599-2600 https://www.carnival.com/</p> <p>Chabot Space and Science Center 10000 Skyline Boulevard Oakland, CA 94619-2446 USA Tel: 510-336-7300 Fax: 510-336-7491 www.chabotspace.org/</p> <p>China National Film Museum No.9, Nanying Road, Chaoyang District Beijing, 100015 CHINA Tel: +86-10-6431-9548 www.cnfm.org.cn/english/main_en.htm</p> <p>China Science and Technology Museum No. 5 Beichen East Road, Chaoyang District Beijing, 100012 CHINA Tel: +86 10 6237 1177 Fax: +86 10 6237 9378 www.cstm.org.cn/</p>	<p>Cincinnati Museum Center 1301 Western Ave Cincinnati, OH 45203 USA Tel: 513-287-7014 Fax: 513-287-7079 www.cincymuseum.org</p> <p>Cité des Sciences et de l'Industrie 30 Avenue Corentin-Cariou Paris, 75019 FRANCE Tel: +33 1 4005 7353 Fax: +33 1 4005 8237 www.cite-sciences.fr</p> <p>Clay Center for the Arts and Sciences One Clay Square Charleston, WV 25301 USA Tel: 304-561-3570 Fax: 304-561-3598 www.theclaycenter.org/</p> <p>Cosmic Picture 64 Oxford Gardens London, W10 5UN UK Tel: +44-20-7792 1699 https://www.cosmopicpicture.com/</p> <p>Carnival Cruise Line 3655 NW 87th Avenue Miami, FL 33178 USA Tel: 305-599-2600 https://www.carnival.com/</p> <p>Chabot Space and Science Center 10000 Skyline Boulevard Oakland, CA 94619-2446 USA Tel: 510-336-7300 Fax: 510-336-7491 www.chabotspace.org/</p> <p>China National Film Museum No.9, Nanying Road, Chaoyang District Beijing, 100015 CHINA Tel: +86-10-6431-9548 www.cnfm.org.cn/english/main_en.htm</p> <p>China Science and Technology Museum No. 5 Beichen East Road, Chaoyang District Beijing, 100012 CHINA Tel: +86 10 6237 1177 Fax: +86 10 6237 9378 www.cstm.org.cn/</p>	<p>Definition Films Building #125 Trackdown 115 Lang Road Entertainment Quarter Sydney, NSW 2021 AUSTRALIA Tel: 847-475-9140 Fax: 847-475-9145 www.gsfilsms.com</p> <p>Destination Cinema, Inc. DCI 3544 Lincoln Avenue, Suite C Ogden, UT 84401 USA Tel: 801-392-2001 Fax: 801-392-6703 https://destinationcinema.com/</p> <p>Dorsey Pictures 10397 W. Centennial Road Littleton, CO 80127 USA Tel: 720-891-4835 www.dorseypictures.tv/</p> <p>Dreamworld Dreamworld Parkway Coomera, QLD 4209 AUSTRALIA Tel: 218-262-6720 Fax: 218-262-5719 https://www.facebook.com/paulicci/</p> <p>FotoKem Industries, Inc. 2801 W. 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Milwaukee Public Museum 800 West Wells Street Milwaukee, WI 53233-2309 USA Tel: 414-278-2700 Fax: 414-278-6100 https://www.mpm.edu/	Ouragan Films La Marie Louise, Route de Cazan Pelissanne, 13330 FRANCE Tel: +44-4 95 06 80 68 www.ouragan-lefilm.com	Sarai, Inc. Urban Shibakoen 4th Fl 3-1-13 Shibakoen, Minato-Ku Tokyo, 105-0011 JAPAN Tel: +81-3-5777-5206 Fax: +81-3-5777-5207	Statement Pictures, LLC 117 9th street, Suite 111 Brooklyn, NY 11215 USA https://www.statementpictures.com/	Transcendent Media Capital 15/F Effectual Building 16 Hennessy Road, Wanchai Hong Kong, CHINA Tel: +351 919 593 245 https://www.transcendent-media.com
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SHORTS

Toni Myers celebration in Sept.

The family of veteran GS producer **Toni Myers**, who died in February (see *Feb.-March 2019*), has said that a celebration of her life will be held at the headquarters of **Imax Corporation** in Sheridan Park, Mississauga, ON, Canada, outside Toronto, on Sunday, Sept. 22, 2019. The “save the date” announcement said that “there will be films to watch, memories to share, and plenty of food.” More details will be made available as the date approaches.

Vuongs help build D-Day theater

The **D-Day Experience Museum** in Normandy, France, recently opened a digital 3D theater to screen the GS film *D-Day: Normandy 1944* (2014), produced in 2014 by **N3D Land Films**.

The film's director, **Pascal Vuong**, tells *LFX* that in 2016 he was approached by the museum's founders, who had seen his film and wanted to show it at the museum, located about 10 miles (16 kilometers) from the Allied landing site dubbed Utah Beach. Although the museum has a 4D simulator that recreates the experience of flying in a WWII C47

transport plane, Vuong says that “they had no theater, not even a small room with a large 3D monitor to show *D-Day*.”

In addition to being filmmakers, both he and his wife, **Catherine Vuong**, are architects, and offered to help build a 3D theater. They created some preliminary sketches and helped the museum select an architect to design a theater to fit into the space between two existing buildings. Local regulations limited the size of the structure, so it is not a true giant-screen theater, but it has a 50-foot (15-meter) screen, 155 seats, a 4K Christie projector, and DKaudio sound system. Construction started in the summer of 2018 and was completed

just in time for the 75th anniversary of D-Day on June 6, 2019.

Pascal Vuong tells us, “the end result is even better than in my dreams and we could not be happier or more proud to have a permanent home for *D-Day: Normandy 1944* here in Normandy.”

2018 GSCA attendance report

The Giant Screen Cinema Association has released a summary of its Theater Attendance Reporting Program for the calendar year 2018, which suggests that attendance in giant-screen theaters remains essentially static.

The program is voluntary, with about



Catherine and Pascal Vuong (center front) helped build a theater in Normandy for D-Day.

half of the association's 95 theater members participating. (There are about 100 more GS theaters that are not members.) Because the responses do not represent a random sample of the entire community, and because certain categories or regions had very few responses, it is difficult to draw statistically meaningful conclusions from the data. Readers are advised to take the numbers only as very rough guidelines.

Looking at North America, with 39 theaters responding, the average annual attendance was 154,422, about 2% higher than 2017, but about 1% below the three-year average. (With only two respondents, data from non-North American theaters

were not sufficient to characterize that segment.)

North American flat screens (n=28) averaged 149,281 in 2018, a 2% increase over the previous year, while domes (n=16) averaged 169,984, a 2% drop.

The general outlook provided by these numbers was echoed by a recent report on museum attendance from the **Themed Entertainment Association**, which surveyed the top 20 museums in each of three global regions: North America, Asia/Pacific, and Europe/Middle East/Africa (EMEA). In North America, where nine of the top 20 museum have GS theaters, attendance among those 20 was down

3%. In Asia/Pacific (three GS screens), attendance increased 0.6%, and in EMEA (two GS theaters), attendance was up 6%.

(For more on the state of GS theaters worldwide, see the report on page 1.)

Great Barrier Reef wins award in China

December Media's **Great Barrier Reef** won the award for “Best Creativity Film” in the Science and Technology category at the Beijing International Film Festival, held at the China Science and Technology Museum. **Mark Brether-**

ton, December's head of distribution, accepted the award at the opening night ceremony.

Great Barrier Reef is distributed by December Media Distribution in the Asia/Pacific region and by **MacGillivray Freeman Films** everywhere else. Visit greatbarrierreeffilm.com.

Avengers sets new IMAX records

In late April, **Marvel's Avengers: Endgame** set a new record for global opening weekend IMAX box office, with \$91.5 million, nearly doubling the previous record holder, **Star Wars: The Force Awakens** (see *SHORTS* on page 16)